



Transcript Exhibit(s)

Docket #(s): W-01303A-09-0343

SW-01303H-09-0343

Exhibit #: See attached exhibit list for the
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BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES

Chairman

GARY PIERCE

Commissioner

PAUL NEWMAN

Commissioner

SANDRA D. KENNEDY

Commissioner

BOB STUMP

Commissioner

IN THE MATTER OF THE APPLICATION OF)
ARIZONA-AMERICAN WATER COMPANY)
FOR DETERMINATION OF THE CURRENT)
FAIR VALUE OF ITS UTILITY PLANT AND)
PROPERTY AND FOR INCREASES IN ITS)
RATES AND CHARGES BASED THEREON)
FOR UTILITY SERVICE BY ITS ANTHEM)
WATER DISTRICT AND ITS SUN CITY)
WATER DISTRICT.)

DOCKET NO. W-01303A-09-0343

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FOR DETERMINATION OF THE CURRENT)
FAIR VALUE OF ITS UTILITY PLANT AND)
PROPERTY AND FOR INCREASES IN ITS)
RATES AND CHARGES BASED THEREON)
FOR UTILITY SERVICE BY ITS ANTHE/AGUA)
FRIA WASTEWATER DISTRICT, ITS SUN)
CITY WASTEWATER DISTRICT AND ITS SUN)
CITY WEST WASTEWATER DISTRICT.)

DOCKET NO. SW-01303A-09-0343

DIRECT TESTIMONY

OF

DOROTHY HAINS, P. E.

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MARCH 8, 2010

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EXHIBITS

Engineering Report for Arizona-American Anthem Water District	DMH-1
Engineering Report for Arizona-American Sun City Water District	DMH-2
Engineering Report for Arizona-American Anthem Wastewater District	DMH-3
Engineering Report for Arizona-American Agua Fria Wastewater District	DMH-4
Engineering Report for Arizona-American Sun City Wastewater District	DMH-5
Engineering Report for Arizona-American Sun City West Wastewater District	DMH-6

INTRODUCTION

Q. Please state your name and business address.

A. My name is Dorothy Hains. My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. By whom and in what position are you employed?

A. I am employed by the Arizona Corporation Commission ("Commission" or "ACC") as a Utilities Engineer - Water/Wastewater in the Utilities Division.

Q. How long have you been employed by the Commission?

A. I have been employed by the Commission since January 1998.

Q. What are your responsibilities as a Utilities Engineer - Water/Wastewater?

A. My main responsibilities are to inspect, investigate and evaluate water and wastewater systems. This includes obtaining data, preparing reconstruction cost new and/or original cost studies, cost of service studies and investigative reports, interpreting rules and regulations, and to suggest corrective action and provide technical recommendations on water and wastewater system deficiencies. I also provide written and oral testimony in rate cases and other cases before the Commission.

Q. How many companies have you analyzed for the Utilities Division?

A. I have analyzed more than 90 companies fulfilling these various responsibilities for Utilities Division Staff ("Staff").

Q. Have you previously testified before this Commission?

A. Yes, I have testified on numerous occasions before this Commission.

1 **Q. What is your educational background?**

2 A. I graduated from the University of Alabama in Birmingham in 1987 with a Bachelor of
3 Science degree in Civil Engineering.

4
5 **Q. Briefly describe your pertinent work experience.**

6 A. Before my employment with the Commission, I was an Environmental Engineer for the
7 Arizona Department of Environmental Quality ("ADEQ") for ten years. Prior to that time,
8 I was an Engineering Technician with C. F. Hains, Hydrology in Northport, Alabama for
9 approximately five years.

10

11 **Q. Please state your professional membership, registrations, and licenses.**

12 A. I have been a registered Civil Engineer in Arizona since 1990. I am a member of the
13 American Society of Civil Engineering ("ASCE"), American Water Works Association
14 ("AWWA") and Arizona Water & Pollution Control Association ("AWPCA").

15

16 **PURPOSE OF TESTIMONY**

17 **Q. What was your assignment in this rate proceeding?**

18 A. My assignment was to provide Staff's engineering evaluation for the subject Arizona-
19 American Water Company ("Company") rate proceeding. Six of the Company's districts
20 are included: Anthem Water District ("Anthem Water"), Sun City Water District ("Sun
21 City Water"), Anthem Wastewater District ("Anthem Wastewater"), Agua Fria
22 Wastewater District ("Agua Fria Wastewater"), Sun City Wastewater District ("Sun City
23 Wastewater") and Sun City West Wastewater District ("Sun City West Wastewater").

1 **Q. What is the purpose of your testimony in this proceeding?**

2 A. To present the findings of Staff's engineering evaluation of operations for Anthem Water,
3 Sun City Water, Anthem Wastewater, Agua Fria Wastewater, Sun City Wastewater and
4 Sun City West Wastewater. The findings are contained in the Engineering Reports that I
5 have prepared for this proceeding. The reports are included as Exhibits DMH-1 through
6 DMH-6 in this pre-filed testimony.

7
8 **ENGINEERING REPORTS**

9 **Q. Would you briefly describe what was involved in preparing your Engineering**
10 **Reports for this rate proceeding?**

11 A. After reviewing the application for the Anthem Water, Sun City Water, Anthem
12 Wastewater, Agua Fria Wastewater, Sun City Wastewater and Sun City West Wastewater,
13 I physically inspected the systems to evaluate their operation and to determine if any plant
14 items were not used and useful. I contacted the Maricopa County Department of
15 Environmental Services ("MCDES") to determine if the water systems were in
16 compliance with the Safe Drinking Water Act water quality requirements. Further, I
17 contacted the Arizona Department of Environmental Quality ("ADEQ") to determine if
18 the wastewater systems were in compliance with the ADEQ wastewater discharge permit
19 requirements. After I obtained information from the Company regarding plant
20 improvements, permits, chemical testing expenses, water usage data and wastewater flow
21 data, I analyzed that information. I also contacted the Arizona Department of Water
22 Resources ("ADWR") to determine if the water systems were in compliance with the
23 ADWR's requirements governing water providers. Based on all the above, I prepared the
24 attached Engineering Reports.

1 **Q. Please describe the information contained in your Engineering Reports.**

2 A. The Reports are divided into three general sections: 1) *Executive Summary*;
3 2) *Engineering Report Discussion*, and 3) *Engineering Report Exhibits*. The *Discussions*
4 section for Anthem Water and Sun City Water can be further divided into ten subsections:
5 A) Location of District; B) Description of the Water System; C) Maricopa County
6 Environmental Services Department ("MCDES") Compliance; D) Arizona Corporation
7 Commission ("ACC") Compliance; E) Arizona Department of Water Resources
8 ("ADWR") Compliance; F) Water Testing Expenses, G) Water Usage, H) Growth; I)
9 Depreciation Rates; J) Other Issues. These subsections provide information about the
10 water systems serving Anthem Water and Sun City Water. The *Discussions* section for
11 Anthem Wastewater, Agua Fria Wastewater, Sun City Wastewater and Sun City West
12 Wastewater is divided into eight subsections: A) Location of District; B) Description of
13 the Wastewater System; C) Wastewater Flow; D) Growth; E) ADEQ Compliance; F)
14 ACC Compliance; G) Depreciation Rates; H) Other Issues. These subsections provide
15 information about the wastewater systems serving Anthem Wastewater, Agua Fria
16 Wastewater, Sun City Wastewater and Sun City West Wastewater.

17

18 **RECOMMENDATIONS AND CONCLUSIONS**

19 **Q. What are Staff's conclusions and recommendations regarding the Company's**
20 **operations?**

21 A. Staff's conclusions and recommendations regarding the Company's operations are listed
22 below.

Anthem Water

Recommendations:

- I. Staff recommends the depreciation rates for Anthem Water presented in Figure 6 in DMH-1 by National Association of Regulatory Commissioners' ("NARUC") account.
- II. Staff recommends \$22,289.24 be reclassified from Account No. 304300 to the Water Treatment Equipment Non-media Account No.320100.
- III. Staff recommends that Anthem Water continue tracking its water loss in the system for two years and submit the data collected every six months. This reporting would begin once a final decision in this matter becomes effective. Staff further recommends that the first report be docketed as a compliance item within 180 days of the effective date of the order issued in this proceeding.
- IV. Staff recommends that the Anthem Water reported annual water testing cost of \$4,469 be adopted for purposes of this proceeding.
- V. Staff recommends that the currently authorized Anthem Water meter and service line installation charges continue to be used as shown under the column headings "Staff Recommended" in Table 5 in DMH-1.

Conclusions:

- I. MCESD has determined that Anthem Water is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.
- II. Anthem Water is within the Phoenix Active Management Area and ADWR has determined that Anthem Water is in compliance with the ADWR requirements governing water providers.

- 1 III. Lost water for Anthem Water was calculated to be less than one percent which is
- 2 within acceptable limits.
- 3 IV. Anthem Water has an approved cross connection tariff.
- 4 V. A check of the Commission Utilities Division Compliance database showed there
- 5 is currently no delinquent compliance items for Anthem Water.
- 6 VI. Anthem Water has adequate storage and production to serve its existing customers
- 7 and reasonable growth.
- 8 VII. Anthem Water has an approved curtailment tariff.
- 9

10 *Sun City Water*

11 **Recommendations:**

- 12 I. Staff recommends the depreciation rates for Sun City Water presented in Figure 6
- 13 in DMH-2 by National Association of Regulatory Commissioners' account.
- 14 II. Staff recommends that the currently authorized Sun City Water meter and service
- 15 line installation charges continue to be used as shown under the column headings
- 16 "Staff Recommended" in Table 8 in DMH-2.
- 17 III. Staff recommends that the Sun City Water reported annual water testing cost of
- 18 \$7,479 be adopted for purposes of this proceeding.
- 19 IV. Staff recommends that the District reduce its water loss to below 10 percent in
- 20 PWS No. 07-099 by December 31, 2010 or before it files next rate case and/or
- 21 CC&N and/or financing application whichever comes first. Staff further
- 22 recommends that Sun City Water continue tracking its water loss for three years
- 23 and submit the data collected every six months. This reporting would begin once a
- 24 final decision in this matter becomes effective. Staff further recommends that the
- 25 first report be docketed as a compliance item within 180 days of the effective date
- 26 of the order issued in this proceeding.

1 **Conclusions:**

- 2 I. MCESD has determined that both Sun City Water systems (PWS Nos. 07-099 and
3 07-532) are currently in compliance with its requirements and is currently
4 delivering water that meets water quality standards required by Arizona
5 Administrative Code, Title 18, Chapter 4.
- 6 II. Sun City Water is within the Phoenix Active Management Area and is in
7 compliance with ADWR monitoring and reporting rules.
- 8 III. Sun City Water has an approved cross connection tariff.
- 9 IV. Sun City Water has adequate storage and production to serve its existing customers
10 and reasonable growth.
- 11 V. Sun City Water has an approved curtailment tariff.
- 12 VI. A check of the Commission Utilities Division Compliance database showed there
13 is currently no delinquent compliance items for Sun City Water.
- 14 V. Staff observed that the replacement Well Nos. 2.4 and 5.1 in Sun City Water were
15 in-service at the time of its inspection.
- 16 VI. Staff observed that rehabilitated Well No. 6.4 in Sun City Water was in-service at
17 the time of its inspection.
- 18 VII. The plant items listed in Table 12 in DMH-2 are plant items that Staff observed
19 and found to be in-service at the time of Staff's inspection.

20
21 *Anthem Wastewater*

22 **Recommendations:**

- 23 I. It is recommended that the Anthem Wastewater use depreciation rates as
24 delineated in Figure 5 in DMH-3.
- 25 II. Staff recommends an annual testing cost of \$62,642 for the Anthem Wastewater.

- 1 III. Staff recommends \$30,900 be reclassified from the Structure and Improvement for
2 Water Treatment Account No. 354200 to the Waste Water Power Generation
3 Equipment Account No.355500.
- 4 IV. Staff recommends \$4,000 be reclassified from the Structure and Improvement for
5 Water Treatment Account No. 354200 to the Waste Water Electric Pump
6 Equipment Account No.371100.
- 7 V. Staff recommends that the current Anthem Wastewater OFHF tariff be replaced
8 with the attached modified OFHF tariff. (See Figure 6 in DMH-3.) Staff further
9 recommends that Anthem Wastewater be required to comply with the Status
10 Reporting Requirements contained in Paragraph J of the attached modified OFHF
11 tariff immediately.

12

13 **Conclusions:**

- 14 I. Anthem Wastewater is in full compliance with ADEQ for operation and
15 maintenance, operator certification and discharge permit limits.
- 16 II. Staff concludes that the Anthem Wastewater treatment plant has adequate capacity
17 to treat the existing customers and reasonable growth in the Anthem Wastewater
18 service area.
- 19 III. A check of the Commission Utilities Division Compliance database showed there
20 is currently no delinquent compliance items for Anthem Wastewater.
- 21 IV. Staff concludes that the Anthem Wastewater Treatment Plant Headwork
22 Modification project had been completed and is in service. Staff further concludes
23 that the project was used and useful at the time of Staff's inspection.

Agua Fria Wastewater

Recommendations:

- I. It is recommended that the Agua Fria Wastewater use depreciation rates as delineated in Figure 6 in DMH-4.
- II. Staff recommends an annual testing cost of \$17,954 for the Agua Fria Wastewater.
- III. Staff recommends \$1,838,737 be adjusted from Verrado plant expansion expenses.
- IV. Staff recommends \$487,000 be reclassified from the Structure and Improvement for Water Treatment Account No. 354400 to the Waste Water Power Generation Equipment Account No.355500.
- V. Staff recommends that the current Agua Fria Wastewater OFHF tariff be replaced with the attached modified OFHF tariff. (See Figure 7 in DMH-4.) Staff further recommends that the Anthem Wastewater be required to comply with the Status Reporting Requirements contained in Paragraph J of the attached modified OFHF tariff immediately.

Conclusions:

- I. ADEQ regulates the Agua Fria Wastewater under Permit Nos. 27395 and 36947 for the Verrado wastewater treatment plant ("WWTP") and Permit Nos. 26497 and 36953 for the Russell Ranch WWTP. Per the February 5, 2008, Compliance Status Reports issued by ADEQ, both systems are in full compliance for operation and maintenance, operator certification and discharge permit limits.
- II. Staff concludes that the Agua Fria WWTPs have adequate capacity to treat the existing customers and reasonable growth in the Agua Fria Wastewater service area.

- 1 III. A check of the Arizona Corporation Commission Utilities Division Compliance
2 database showed there is currently no delinquent compliance item for the Agua
3 Fria Wastewater.

4
5 *Sun City Wastewater*

6 **Recommendations:**

- 7 I. Staff recommends that the depreciation rates by National Association of
8 Regulatory Commissioners' account presented in Figure 6 in DMH-5 be used for
9 purposes of this proceeding.
10 II. Staff recommends that \$12,242 in expense be reclassified to Sun City Wastewater
11 District's Account for Waste Water Force Mains (account #360000).

12
13 **Conclusions:**

- 14 I. Staff concludes that the Sun City Wastewater has adequate treatment capacity to
15 serve its existing customer base and reasonable growth.
16 II. A check of the Commission Utilities Division Compliance database showed there
17 is currently no delinquent compliance item for Sun City Wastewater.

18
19 *Sun City West Wastewater*

20 **Recommendations:**

- 21 I. It is recommended that the Sun City West Wastewater use depreciation rates for
22 Sun City West Wastewater as delineated in Figure 6 in DMH-6.

23
24 **Conclusions:**

- 25 I. Sun City West Wastewater is in full compliance with ADEQ for operation and
26 maintenance, operator certification and discharge permit limits.

1 II. Staff concludes that the Sun City West Wastewater treatment plant has adequate
2 capacity to treat the Sun City West area and the Corte Bella area and reasonable
3 growth.

4 III. A check of the Commission Utilities Division Compliance database showed there
5 is currently no delinquent compliance item for Sun City West Wastewater.

6 IV. Staff accepts the Sun City West Wastewater reported \$13,196 for water quality
7 testing expense for this proceeding.

8

9 **Q. Does this conclude your Direct Testimony?**

10 A. Yes, it does.

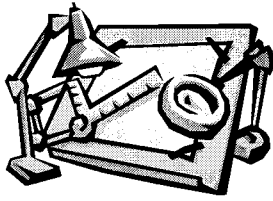
EXHIBIT DMH-1

ENGINEERING REPORT FOR ARIZONA-AMERICAN WATER COMPANY

ANTHEM WATER DISTRICT

BY DOROTHY HAINS, P.E.

MARCH 1, 2010



**Engineering Report
For Arizona-American Water
Company's Anthem Water District
Docket No. W-01303A-09-0343
By Dorothy Hains, P.E.
February 22, 2010**

EXECUTIVE SUMMARY

RECOMMENDATIONS:

- I. Staff recommends the depreciation rates presented in Figure 6 by National Association of Regulatory Commissioners' account. (See §I of report for discussion and details.)
- II. Staff recommends \$22,289.24 be reclassified from Account No. 304300 to the Water Treatment Equipment Non-media Account No.320100. (See §J of report for discussion and details.)
- III. Staff recommends that Arizona American – Anthem Water District (“Anthem Water”, “District” or “Company”) continue tracking its water loss in the system for two years and submit the data collected every six months. This reporting would begin once a final decision in this matter becomes effective. Staff further recommends that the first report be docketed as a compliance item within 180 days of the effective date of the order issued in this proceeding. (See §G of report for discussion and details.)
- IV. Staff recommends that the District reported annual water testing cost of \$4,469 be adopted for purposes of this proceeding. (See §F of report for discussion and details.)
- V. Staff recommends that the currently authorized meter and service line installation charges continue to be used as shown under the column headings “Staff Recommended” in Table 5. (See §J of report for discussion and details.)

CONCLUSIONS:

- I. Maricopa County Environmental Services Department (“MCESD”) has determined that Anthem Water is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. (See §C for a discussion and details)
- II. Arizona Department of Water Resource (“ADWR”) has determined that Anthem Water is in compliance with the ADWR requirements governing water providers. (See §E of report for discussion and details.)

- III. Lost water for Anthem was calculated to be less than one percent which is within acceptable limits. (See §G of report for discussion and details.)
- IV. Anthem Water has an approved cross connection tariff.
- V. Anthem Water has adequate storage and production to serve its existing customers and reasonable growth. (See §B of report for discussion and details.)
- VI. Anthem Water has an approved curtailment tariff.
- VII. A check of the Commission Utilities Division Compliance database showed there is currently no delinquent compliance items for Anthem Water. (See §D of report for discussion and details.)

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A. LOCATION OF DISTRICT

Arizona American – Anthem Water District (“Anthem Water”, “District” or “Company”) serves approximately 8,600 customers in Anthem, an unincorporated community which is adjacent to the town of New River which is located north of the City of Phoenix (“Phoenix”) in Maricopa County. Figure 1 describes the location of the District within Maricopa County, and Figure 2 describes the CC&N area of the District.

B. DESCRIPTION OF THE WATER SYSTEM

The plant facilities were visited on September 3, 2009, by Dorothy Hains, Utilities Engineer, accompanied by Company representative, Michael Helton (Arizona American Water Co. Production Superintendent), Hector Delgadillo (Arizona American Water Co. Production Supervisor) and Larry Berry (Arizona American Water Co. Water Quality Specialist).

1. System Analysis

Anthem Water consists of one 7 million gallon per day (“MGD”) surface water treatment plant, two wells that are capable of producing a total flow of 1,200 gallons per minute (“GPM”), and 3 million gallons (“MG”) of storage capacity. The District has a water purchase agreement with the Ak-Chin Indian Community, under the agreement the District can purchase up to 4,861 GPM of Central Arizona Project (“CAP”) water. A pump station located at the CAP canal pumps water through a pipeline to the surface water treatment plant.¹ The District also receives water through an interconnection with the Phoenix municipal water system. The Phoenix interconnection is capable of delivering an additional 3,472 GPM of water to the District.

The District has adequate storage and source production to serve its existing customers and reasonable growth. Figures 3A, 3B, 3C and 3D provide a process schematic showing both the active and inactive components of the water system.

Table 1. Plants in the District

Active Drinking Water Wells

Well #	ADWR No.	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)
2	55-577504	2000	12	600	8	125	700
3	55-577505	2000	12	600	8	100	500

¹ The CAP canal interconnection facilities are owned by the District.

Other Water Sources

	Type	Capacity (GPM)
CAP water	Untreated surface water	4,861
City of Phoenix	Treated potable water	3,472

In active Well

Well #	ADWR No.	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)
1	55-565683	1998	18	1,520	6	100	200

Anthem Surface Water Treatment Plant ("AWTP")

Number of treatment plant	1
Plant location	At King Dr, Anthem
Type	Zenon micro filtration, UV and chlorine disinfection
treatment capacity (normal operation condition)	7 million gallons per day ("MGD")
Source	CAP water

Active Storage, Pumping

Location	Type	Structure or equipment	Capacity
AWTP	Drinking water	Booster Pumps	Three 150-HP Two 350-HP Two 450-HP
		Storage Tank s	Two 1,250,000 gal
		Pressure Tank	One 5,000 gal
AWTP	Irrigation water	Storage pond	1,000,000 gal lined pond
		Booster Pumps	One 150-HP Two 450-HP
AWTP	Untreated CAP water	Storage pond	One 3,200,000 gal lined pond One 900,000 gal lined pond
		Pump station	Two 30-HP Two 40-HP
CAP water intake (pump station)	Untreated CAP water	Pump Station	Two 200-HP Two 300-HP
		Pressure tank	One 15,000 gal
Upper Reservoir Site	Drinking water	Booster Pumps	Two 25-HP One 30-HP Two 100-HP
		Pressure Tanks	Two 10,000 gal
		Storage tanks	Two 1,250,000 gal underground concrete tanks

Distribution Mains

Diameter (inches)	Material	Length (feet)
4	polyvinyl chloride ("PVC")	6,861
6	PVC	78,895
8	PVC	361,468
10	PVC	518
12	PVC	212,068
14	PVC	1,227
16	PVC	33,473
18	PVC	21,683
20	PVC	5,709
24	PVC	8,270
30	PVC	46,308

Meters

Size (inches)	Quantity
$\frac{3}{4}$	10
1	5,003
$1\frac{1}{2}$	124
2	171
3	11
4	5
6	3
8	2
10	1
12	1

C. MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT ("MCESD") COMPLIANCE

MCESD has determined that Anthem Water is currently in compliance with its requirements and is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.²

D. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check of the Commission Utilities Division Compliance database showed there is currently no delinquent compliance items for the District.

² Based on MCESD memorandums dated May 21, 2009 and July 22, 2009.

E. ARIZONA DEPARTMENT OF WATER RESOURCES (“ADWR”) COMPLIANCE

Anthem Water is in Phoenix Active Management Area (“AMA”). Staff received a Compliance Status Report from ADWR on August 5, 2009. In its report ADWR stated that Anthem Water is in compliance with its requirements governing water providers.

F. WATER TESTING EXPENSES

The District reported an annual water testing expense for Anthem Water of \$4,469 during the test year (See Table 2 - District Reported Testing Cost). Staff estimated the total annual water testing cost for Anthem Water to be \$18,089. (See Table 2 – Staff Estimated).

Table 2 Water Testing Cost (Anthem Water District - PWS #07-504)

District Reported Testing Cost				
Monitoring – Ground Water (2 wells)	No. of tests per three years	Cost per test (Company’s)	Co’s Total cost per three years (\$)	Company Reported Total Annual Test Costs
Bacteriological – monthly	1,080	\$11	11,880	\$3,960
Customer requested bact	36	\$11	396	\$132
Customer requested heterotrophic plate count (“HPC”)	9	\$35	315	\$105
Radiochemical – (1/3 yr)				
Gross Alpha	1	\$60	60	\$20
Uranium	1	\$140	140	\$47
Radium 228	1	\$130	130	\$43
Radium 226	1	\$100	100	\$33
Inorganics – Priority Pollutants			0	
Phase II and V:				
IOCs - 1/3 year	4	N/A	0	0
SOCs - 1/3 year	4	N/A	0	0
VOCs - 1/3 year	4	N/A	0	0
Dioxin	2	\$500	1,000	\$111
Nitrites – 1/9 year	12	N/A	0	0
Nitrates – annual*	12	N/A	0	0
Asbestos – 1/9 year	1	\$160	160	\$18
Lead & Copper - Triennial	30	N/A	0	0
TTH/HHAs - annual	32	N/A	0	0
Arsenic – quarterly	4	N/A	0	0
Total				\$4,469

Staff Estimated - Ground Water Testing Cost

Monitoring – Ground Water (2 wells)	No. of tests	Cost per test (Staff estimated)	Staff Estimated Annual Cost
Bacteriological – monthly	12	20	\$480
Radiochemical – (1/ 3 yr)			
Gross Alpha	1/3	60	\$20
Uranium	1/3	N/A	N/A
Radium 228 & Radium 226	1/3	220	\$73
Inorganics – Priority Pollutants	1/3	252	
Phase II and V:			
IOCs - 1/3 year	1/3	88	\$29
SOCs - 1/3 year	1/3	350	\$117
VOCs - 1/3 year	1/3	220	\$73
Dioxin – 1/9 year	1/3	350	\$117
Nitrites – 1/9 year	1/9	15	\$2
Nitrates – annual*	1	25	\$25
Asbestos – 1/9 year	1/3	160	\$53
Unregulated Contaminant Monitoring Regulation (“UCMR”) – 1/5 year	N/A	N/A	
Arsenic – quarterly	4	105	\$420
Total			\$1,409

Staff Estimated - Raw Surface Water Testing Cost

Monitoring – CAP Intake (Raw Surface Water)	No. of tests	Cost per test (Staff estimated)	Staff calculated Total cost
Total Fecal Coliform – weekly	52	\$20	\$1,040
Giardia / Cryptosporidium – monthly	12	\$400	\$4,800
Copper - monthly	12	\$13	\$156
Metals - monthly	12	\$104	\$1,248
Total			\$7,244

Staff Estimated - Treated Potable Water Testing Cost

Monitoring – Treated Drinking Water	No. of tests	Cost per test (Staff estimated)	Staff calculated Total cost
Bacteriological – monthly	24	\$20	\$480
Inorganics – Priority Pollutants	1/3	\$252	
Radiochemical – (1/ 3 yr)	1/3	60	\$20
Gross Alpha	1/3	N/A	N/A
Uranium	1/3	220	\$73
Radium 228 & Radium 226			
Phase II and V:			
IOCs - 1/3 year	1/3	252	\$84
SOCs - 1/3 year	1/3	350	\$117
VOCs - 1/3 year	1/3	220	\$73
Dioxin – 1/9 year	1/9	350	\$39
Nitrites – 1/9 year	1/9	15	\$2
Nitrates – quarterly*	4	25	\$100
Unregulated Contaminant Monitoring Regulation (“UCMR”) – 1/5 year	N/A	N/A	N/A
Asbestos – 1/9 year	1/9	160	\$18
Total			\$1,006

Staff Estimated - Potable Water (Distribution System) Testing Cost

Monitoring – Distribution (treated water)	No. of tests	Cost per test (Staff estimated)	Staff calculated Total cost
Total Fecal Coliform – monthly	296	\$20	\$5,920
Copper & Lead	30	\$45	\$1,350
TTHMs /HAAs - quarterly	4	\$290	\$1,160
Total			\$8,430

The District informed Staff that some water testing is performed at Arizona - American Water Company's lab in Belleville and that these costs would be included in the allocation of corporate expenses and as a result were not duplicated in the District's reported testing cost listed above. The District did not identify how much Belleville lab cost would be allocated to the District. Therefore, Staff recommends that the District reported annual water testing cost of \$4,469 be adopted for purposes of this proceeding.

G. WATER USAGE

Table 3 is the water usage data reported by the District for the test year of January 2008 through December 2008. Figure 4 is a graph that shows water consumption data in gallons per day ("GPD") per customer for the test year.

Table 3 Water Usage in Anthem Water District

Month	Number of Customers	Water Sold (gallons)	Water pumped (gallons)	Water purchased (gallons)	City of Phoenix (gal)	Daily Average (in gpd/customer)
Jan 08	8,533	97,290,000	0	96,263,600	0	368
Feb 08	8,526	109,833,000	24,000	840,660,000	0	460
Mar 08	8,515	89,464,000	0	110,510,000	0	339
Apr 08	8,492	108,688,000	0	122,479,000	0	427
May 08	8,488	123,604,000	0	140,068,000	0	470
Jun 08	8,485	139,371,000	0	154,375,000	0	548
Jul 08	8,480	164,269,000	0	160,002,000	0	625
Aug 08	8,467	150,557,000	0	160,218,000	0	574
Sep 08	8,460	146,808,000	0	136,505,000	3,000	578
Oct 08	8,483	136,585,000	40,000	139,948,000	0	519
Nov 08	8,491	135,324,000	123,000	119,755,000	977,000	531
Dec 08	8,605	107,540,000	26,000	96,408,000	140,000	403
total		1,509,333,000	213,000	1,520,597,000	1,120,000	
Average						487

1. Water Sold

Based on information provided by the Company, water use for the year 2008 is presented in Figure 4. The high monthly water use was 625 gallons per day ("GPD") per connection in July, and the low monthly water use was 339 GPD per connection in March. The average annual use was 487 GPD per connection.

2. Loss Water

Loss water should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, fire fighting, and flushing. Lost water for Anthem was calculated to be less than one percent which is within acceptable limits.

Using water use data provided by the Company, Staff calculated water loss at less than one percent for the test year. The company recently informed Staff that it believed its actual water loss for the test year was between one and seven percent which is below Staff's recommended threshold of ten percent and complies with Commission Decision No. 70372 that required the

Company to reduce its water loss. Staff believes that most of the improvement in this area since Decision No. 70372 was issued is due to significant improvements in the area of water use monitoring and tracking. Staff however continues to be concerned about the water use data reported for the test year. To ensure that the water loss remains below the 10 percent threshold, Staff recommends that the District continue tracking its water loss in the system for two years and submit the data collected every six months. This reporting would begin once a final decision in this matter becomes effective. Staff further recommends that the first report be docketed as a compliance item within 180 days of the effective date of the order issued in this proceeding.

3. Irrigation Water Usage

A mixture of final treated effluent from Anthem Wastewater Treatment Plant and untreated CAP water has been sold to 65 irrigation customers in the Anthem service area. Table 3A is the irrigation water usage data reported by the District for the 2008 test year,

Table 3A Irrigation Water Usage in Anthem Water District

Month	Number of Customers	Water Sold (gallons)	Effluent Water pumped (gallons)	CAP untreated water (gallons)	Daily Average (gpd/customer)
Jan 08	60	19,36,000	20,364,000	876,000	10,411
Feb 08	60	12,984,000	18,769,000	1,746,000	7,729
Mar 08	61	23,842,000	45,999,000	2,818,000	12,608
Apr 08	58	48,288,000	61,788,000	9,929,000	27,752
May 08	52	61,963,000	74,874,000	10,437,000	38,439
Jun 08	52	65,144,000	81,597,000	15,182,000	43,682
Jul 08	52	78,328,000	81,478,000	17,430,000	48,591
Aug 08	54	56,887,000	74,749,000	9,759,000	33,983
Sep 08	54	26,768,000	62,429,000	10,959,000	16,523
Oct 08	54	62,058,000	67,728,000	12,420,000	37,072
Nov 08	55	114,605,000	45,466,000	1,657,000	69,458
Dec 08	65	26,724,000	21,026,000	507,000	13,263
total		599,955,000	656,267,000	93,720,000	
Average					29,959

H. GROWTH

Figure 5 shows customer growth based on the service connection data contained in the Company's annual reports, the number of customers increased from 3,339 at the end of 2002 to 8,602 by the end of 2008, with an average growth rate of 565 customers per year from 2002 to 2008. Based on the linear regression analysis, Staff estimates that the Company could have approximately 11,793 customers by the end of 2013. The following table summarizes Staff and the Company's projected growth.

Table 4 Actual and Projected Growth

Year	Nos. of Customers	
2002	3,339	Reported
2003	3,913	Reported
2004	5,786	Reported
2005	6,697	Reported
2006	8,624	Reported
2007	8,552	Reported
2008	8,605	Reported
2009	9,533	Estimated
2010	10,098	Estimated
2011	10,663	Estimated
2012	11,228	Estimated
2013	11,793	Estimated

I. DEPRECIATION RATES

Decision No. 70372 (dated June 13, 2008) approved the depreciation rates used by the District in this rate proceeding except that the Company reorganized the authorized rates utilizing the National Association of Regulatory Commissioners' ("NARUC") latest plant account matrix as presented in Figure 6. Staff recommends the depreciation rates presented in Figure 6 by NARUC account.

J. OTHER ISSUES

1. Service Line and Meter Installation Charges

The District did not request that its currently authorized meter and service line installation charges be changed in this rate proceeding. Staff recommends that the currently authorized rates continue to be used as shown under the column headings “Staff Recommended” in Table 5.

Table 5 Service Line and Meter Installation Charges (Anthem Water)

[illegible]

2-inch (Turbo)	\$580	\$945	\$580	\$945	\$945	\$580	\$1,525
2-inch (Compound)	\$580	\$1,640	\$580	\$1,640	\$1,640	\$580	\$2,220
3-inch (Turbo)	\$745	\$1,420	\$745	\$1,420	\$1,420	\$745	\$2,165
3-inch (Compound)	\$765	\$2,195	\$765	\$2,195	\$2,195	\$765	\$2,960
4-inch (Turbo)	\$1,090	\$2,270	\$1,090	\$2,270	\$2,270	\$1,090	\$3,360
4-inch (Compound)	\$1,120	\$3,145	\$1,120	\$3,145	\$3,145	\$1,120	\$4,265
6-inch (Turbo)	\$1,610	\$4,425	\$1,610	\$4,425	\$4,425	\$1,610	\$6,035
6-inch (Compound)	\$1,630	\$6,120	\$1,630	\$6,120	\$6,120	\$1,630	\$7,750
Over 6-inch	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost

2. Curtailment Tariff

The Company has an approved curtailment tariff on file with the Commission.

3. Cross Connection & Backflow Tariff

The Company has an approved Cross Connection & Backflow Tariff.

4. Reclassifications

An expense of \$22,289.24 was listed in the Structure and Improvement for Water Treatment Account No. 304300. Staff understands this expense was actually payment for chemical feed and water quality monitoring equipment at the CAP Pumping Station. Staff recommends \$22,289.24 be reclassified to the Water Treatment Equipment Non-media Account No.320100.

FIGURE 1

ANTHEM WATER DISTRICT CERTIFICATED AREA

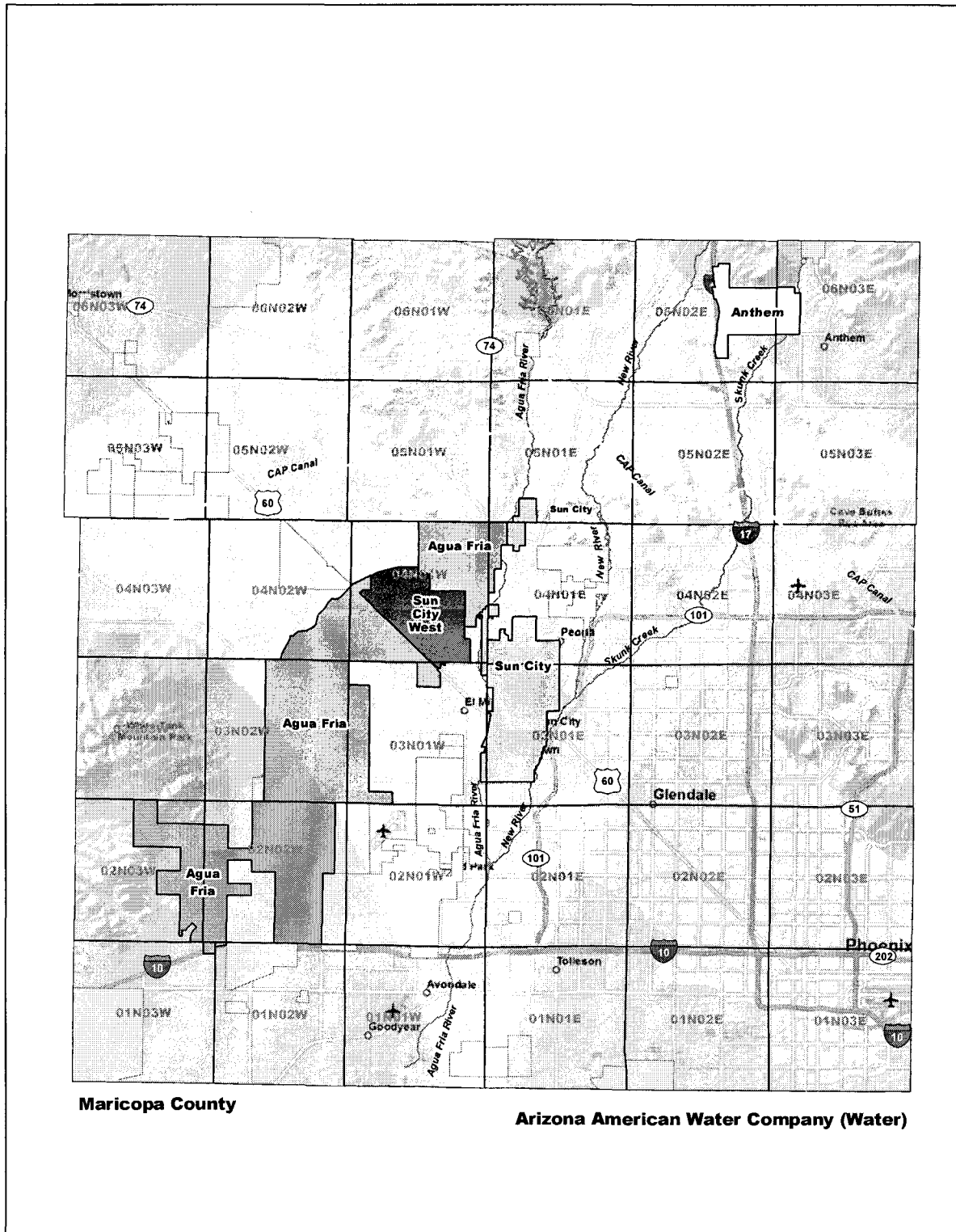


FIGURE 2
LOCATION OF ANTHEM WATER DISTRICT

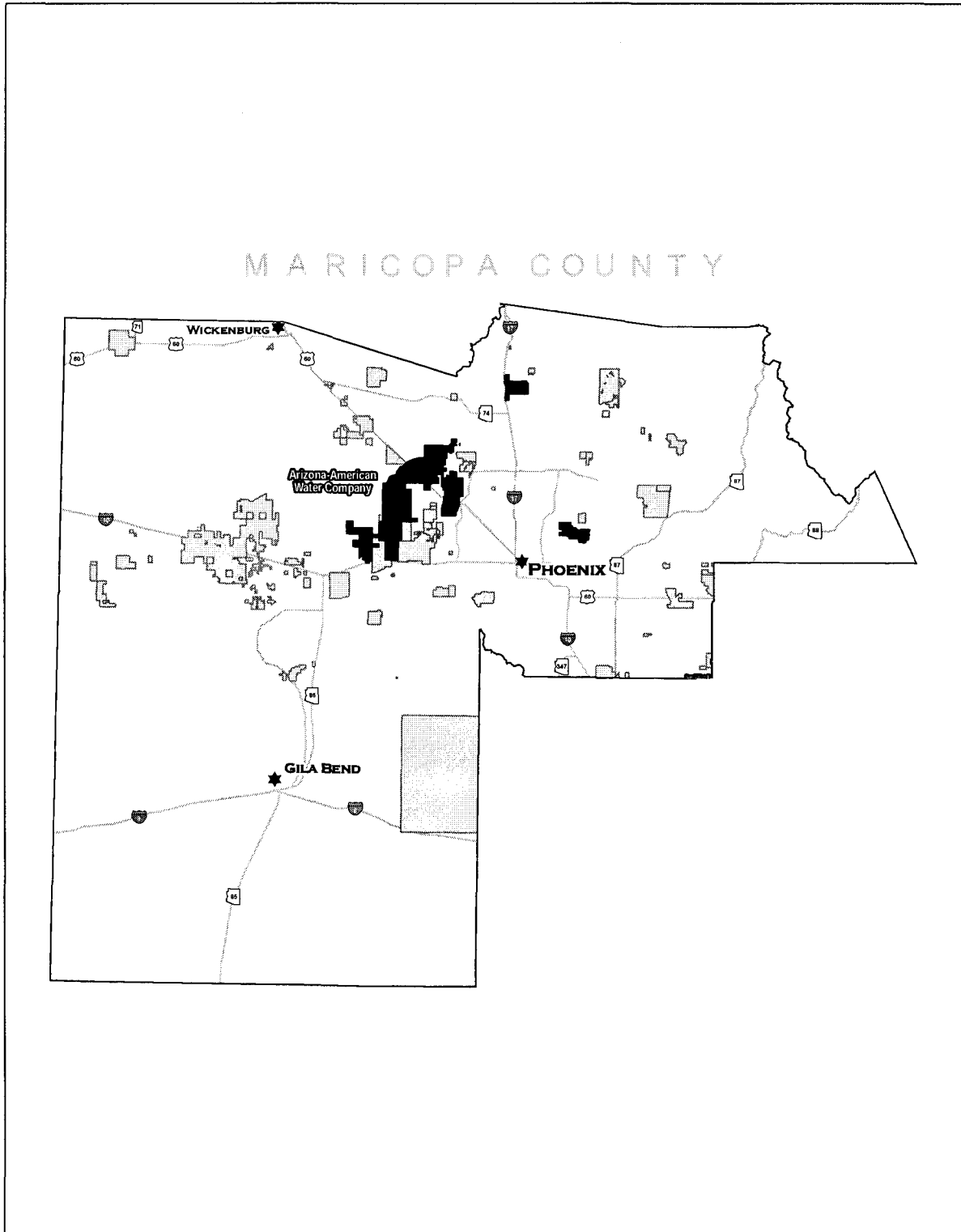


FIGURE 3A
ANTHEM WATER DISTRICT SYSTEMATIC DIAGRAM

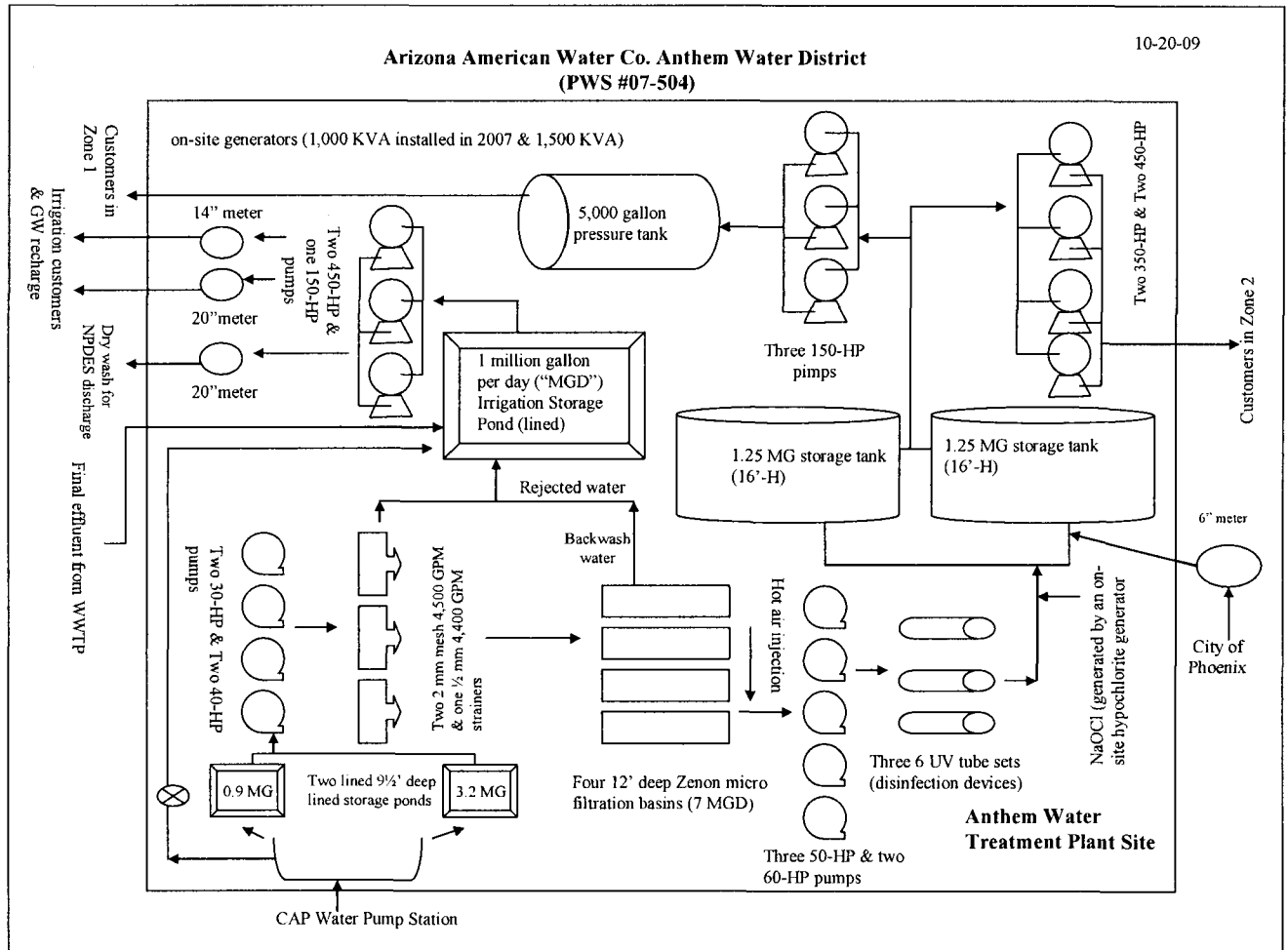


FIGURE 3B
ANTHEM WATER DISTRICT SYSTEMATIC DIAGRAM

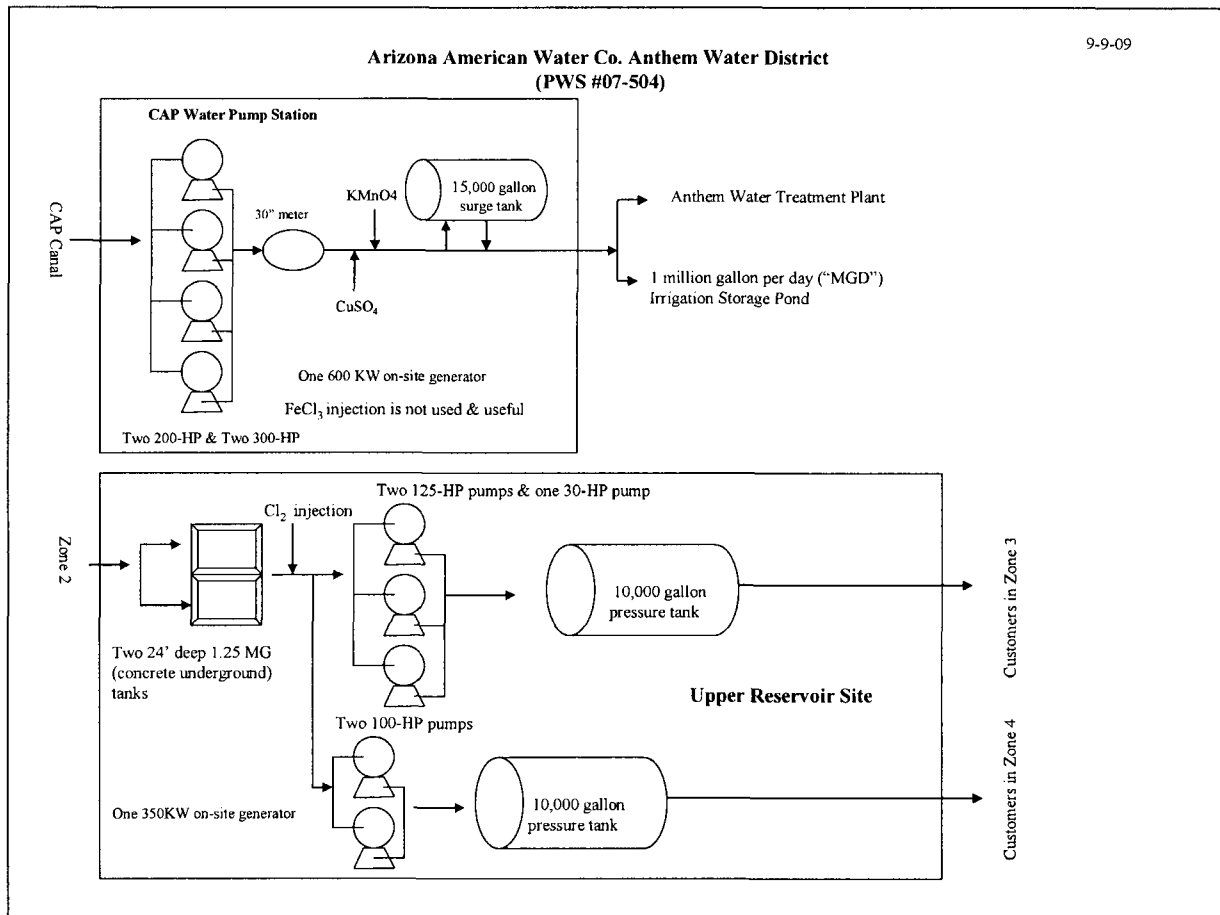


FIGURE 3C

ANTHEM WATER DISTRICT SYSTEMATIC DIAGRAM

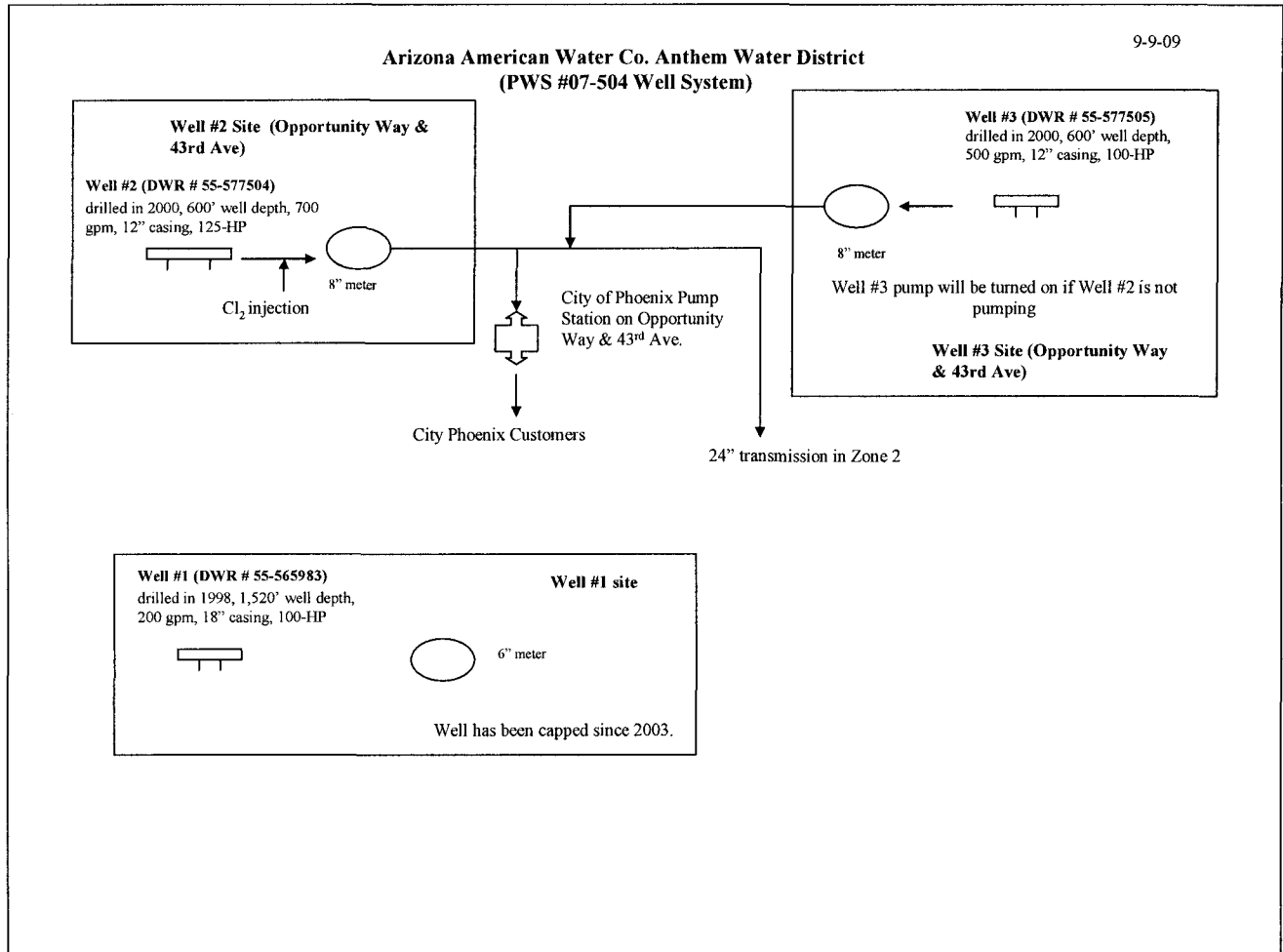


FIGURE 3D

ANTHEM WATER DISTRICT SYSTEMATIC DIAGRAM

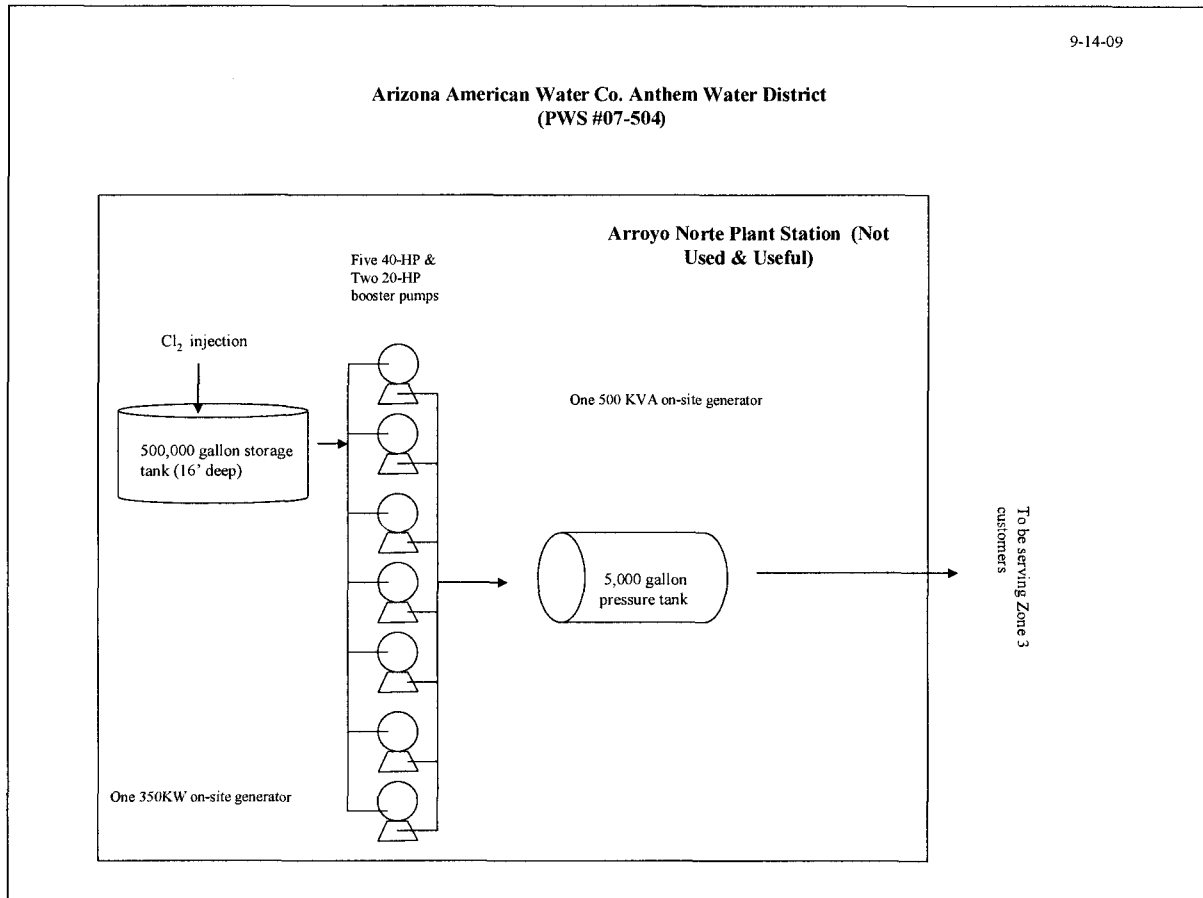


FIGURE 4

ANTHEM WATER DISTRICT WATER USAGE

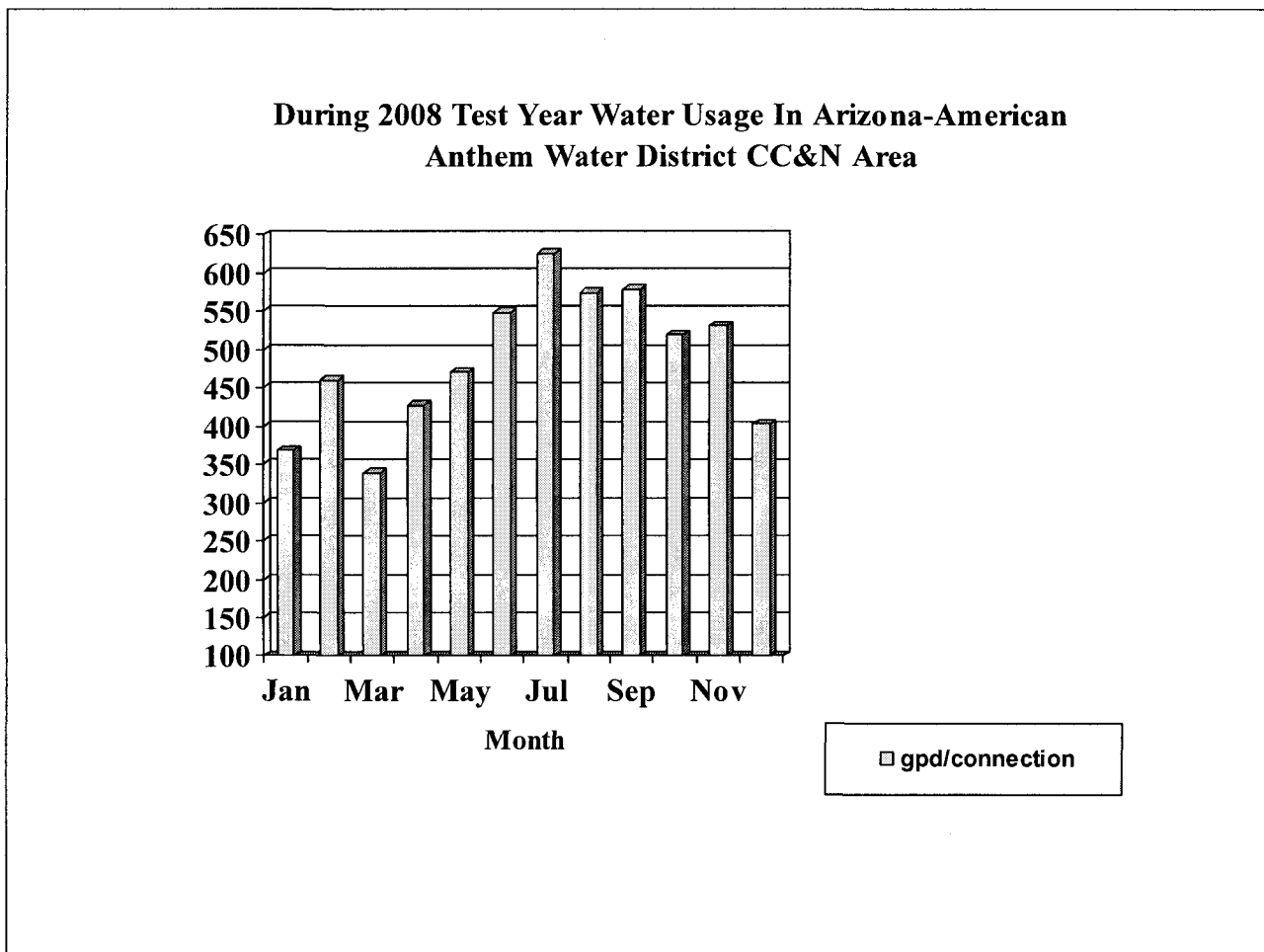


FIGURE 5
GROWTH IN ANTHEM WATER DISTRICT

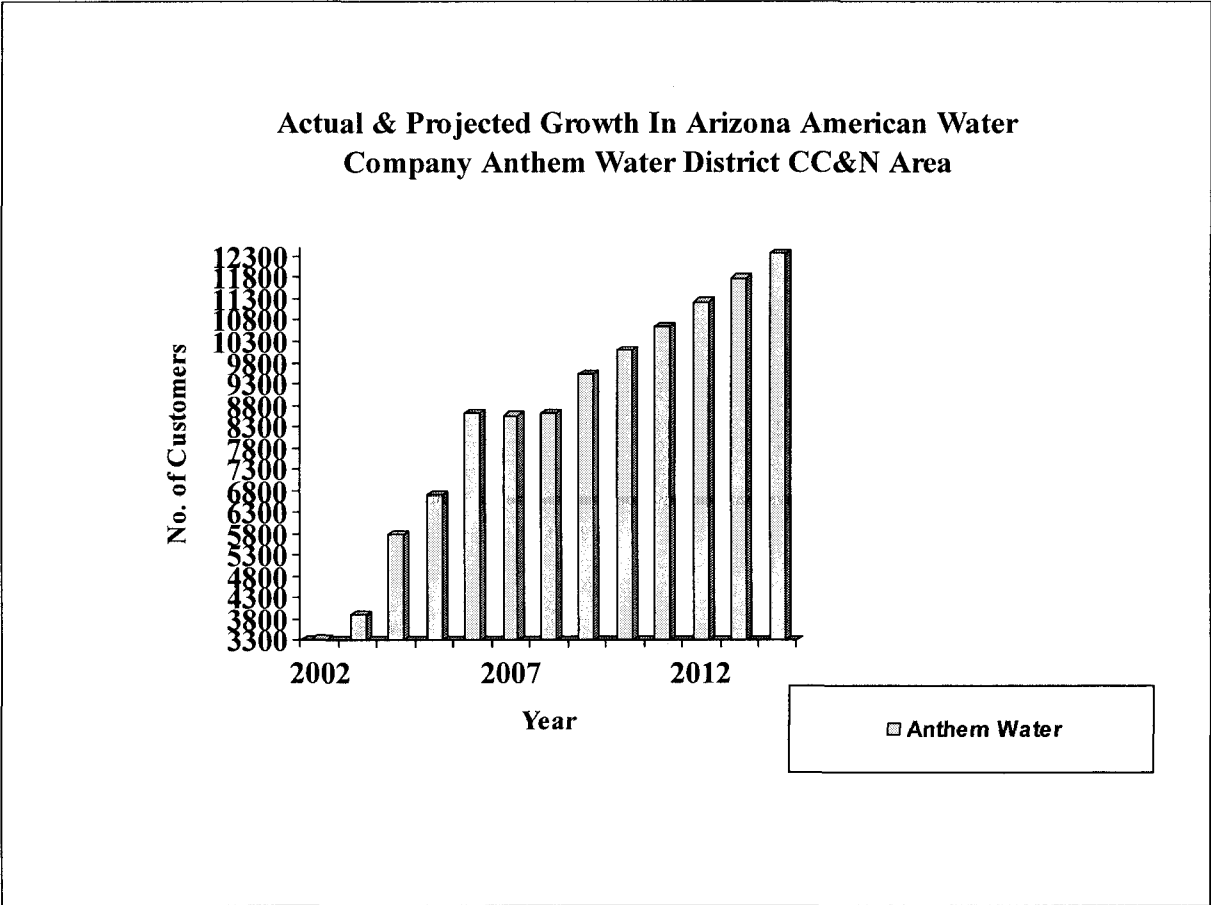


FIGURE 6

DEPRECIATION RATES FOR WATER SYSTEMS –Anthem Water District

NARUC Acct	Company's Account #.	Depreciable Plant	Decision # 70372	Company's proposed rate (%)	Staff Recommended Rate (%)
301	301000	Organization	0	0	0
302	302000	Franchises	0	0	0
303	303200	Land & Ld Rights SS	0	0	0
	303300	Land & Ld Rights P	0	0	0
	303500	Land & Ld Rights TD	0	N/A	0
	303600	Land & Land Rights AG	0	N/A	0
304	304100	Struct & Imp SS	2.50	2.50	2.50
	304200	Struct & Imp P	1.67	1.67	1.67
	304300	Struct & Imp WT	1.67	1.67	1.67
	304400	Struct & Imp TD	1.67	1.67	1.67
	304510	Struct & Imp AG Cap Lease	0	N/A	0
	304600	Struct & Imp Offices	1.67	1.68	1.67
	304620	Struct & Imp Leasehold	1.67	0.	1.67
	304700	Struct & Imp Store,Shop,Gar	0.00	N/A	0.00
305	305000	Collect & Impounding	1.67	2.50	2.50
306	306000	Lake, River & Other Intakes	2.50	2.50	2.50
307	307000	Wells & Springs	2.52	2.52	2.52
308	308000	Infiltration Galleries & Tunne	N/A	6.67	2.00 ³
310	310100	Power Generation Equip Other	N/A	4.42	4.42
311	311200	Pump Equip Electric	4.42	4.42	4.42
	311300	Pump Equip Diesel	N/A	4.42	4.42
	311500	Pump Equip Other	4.42	4.42	4.42
320	320100	WT Equip Non-Media	4.00	7.06 ⁴	7.06
	320200	WT Equip Filter Media	N/A	5.00 ⁴	5.00
330	330000	Dist Reservoirs & Standpipe	1.67	1.67	1.67
331	331001	TD Mains Not Classified by size	1.53	1.56	1.53
	331100	TD Mains 4-inch & Less	1.53	1.53	1.53
	331200	TD Mains 6-inch to 8-inch	1.53	1.53	1.53
	331300	TD Mains 10-inch to 16-inch	1.53	1.53	1.53
333	333000	Services	2.48	2.48	2.48
334	334100	Meters	2.51	6.67 ⁴	6.67
	334200	Meter Installations	2.51	2.51	2.51
	334300	Meter Vaults	N/A	2.51	2.51
335	335000	Hydrants	1.99	2.00	2.00
336	N/A	Backflow Prevention Devices	N/A	N/A	6.67
340	340100	Office Furniture & Equip	4.59	4.55	4.55
	340200	Comp & Periph Equip	4.59	10.00 ⁴	10.00
	340300	Computer Software	N/A	25.00 ⁴	25.00
	340330	Comp Software Other	N/A	25.00 ⁴	25.00

341	341100	Trans Equip Lt Duty Trks	25.00	20.00 ⁴	20.00
	341200	Trans Equip Hvy Duty Trks	25.00	15.00 ⁴	15.00
	341300	Transportation Equipment – Other ¹	N/A	25.00	20.00
	341400	Trans Equip Other ²	25.00	16.67	16.67
342	342000	Stores Equipment	0.00	N/A	0.00
343	343000	Tools, Shop, Garage Equip	1.53	4.14	4.14
344	344000	Laboratory Equipment	3.71	3.71	3.71
345	345000	Power Operated Equipment	1.53	5.14	5.14
346	346100	Comm Equip Non-Telephone	9.76	10.28	10.28
	346190	Remote Control & Instrumentation	N/A	9.76	9.76
	346200	Comm Equip Telephone	9.76	9.76	9.76
	346300	Comm Equip Other	7.91	4.93	4.93
347	347000	Misc Equipment	0.00	6.19	6.19

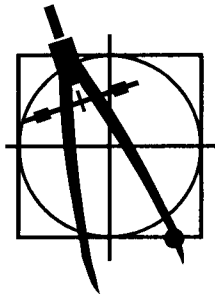
- Notes:
1. Per the Company, this account reflects transportation automobiles.
 2. Per the Company, this account reflects transportation equipment other than trucks, such as trailers and cars, etc.
 3. Per the Company's response to Data Request No. STF 14.8, this account includes source water supply facilities, such as, the CAP pumping station and pipeline from the CAP canal to the Anthem Water Treatment Plant. The depreciation rate is consistent with that of Account Nos. 331400 and 30900 used in the Sun City Water District.
 4. Approved in Decision No. 71410.

EXHIBIT DMH-2

**ENGINEERING REPORT FOR ARIZONA-AMERICAN WATER COMPANY,
SUN CITY WATER DISTRICT**

BY DOROTHY HAINS, P. E.

MARCH 1, 2010



**Engineering Report for Arizona-
American Water Company,
Sun City Water District
Docket No. W-01303A-09-0343
(Rate Increase Application)**

By Dorothy Hains, P. E.

March 1, 2010

EXECUTIVE SUMMARY

RECOMMENDATIONS:

- I. Staff recommends the depreciation rates presented in Figure 6 by National Association of Regulatory Commissioners' account. (See §I of report for discussion and details.).
- II. Staff recommends that the currently authorized meter and service line installation charges continue to be used as shown under the column headings "Staff Recommended" in Table 8. (See §J of report for discussion and details.)
- III. Staff recommends that the Arizona-American Water Company Sun City Water District ("Sun City Water" or "District") reported annual water testing cost of \$7,479 be adopted for purposes of this proceeding. (See §F of report for discussion and details.)
- IV. Staff recommends that the District reduce its water loss to below 10 percent in PWS No. 07-099 by December 31, 2010 or before it files next rate case and/or CC&N and/or financing application whichever comes first. Staff further recommends that the District continue tracking its water loss for three years and submit the data collected every six months. This reporting would begin once a final decision in this matter becomes effective. Staff further recommends that the first report be docketed as a compliance item within 180 days of the effective date of the order issued in this proceeding. (See §G of report for discussion and details.).

CONCLUSIONS:

- I. Maricopa County Environmental Services Department ("MCESD") has determined that both Sun City water systems (PWS Nos. 07-099 and 07-532) are currently in compliance with its requirements and is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. (See §D of the report for discussion and details.)

- II. Sun City Water is within the Phoenix Active Management Area and is in compliance with the Arizona Department of Water Resource ("ADWR") monitoring and reporting rules. (See §E of report for discussion and details)
- III. Sun City Water has an approved cross connection tariff. (See §J of report for discussion and details)
- IV. Sun City Water has adequate storage and production to serve its existing customers and reasonable growth. (See §B of report for discussion and details)
- V. Sun City Water has an approved curtailment tariff. (See §J of report for discussion and details)
- VI. Staff observed that the replacement Well Nos. 2.4 and 5.1 were in-service at the time of its inspection. (See §K of report for discussion and details).
- VII. Staff observed that rehabilitated Well No. 6.4 was in-service at the time of its inspection. (See §K of report for discussion and details).
- VIII. The plant items listed in Table 12 are plant items Staff observed and found to be in-service at the time of Staff's inspection. (See §K of report for discussion and details).
- IX. A check of the Commission Utilities Division Compliance database showed there is currently no delinquent compliance items for Sun City Water. (See §D of report for discussion and details.)

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A. LOCATION OF DISTRICT

Arizona-American Water Company Sun City Water District ("Sun City Water" or "District") serves water to approximately 23,000 customers and is located in the Town of Sun City which is west of the City of Phoenix in Maricopa County. Figure 1 describes the location of Sun City Water, and Figure 2 describes the Certificate of Convenience and Necessity ("CC&N") area of Sun City Water.

B DESCRIPTION OF THE WATER SYSTEM

The plant facilities were visited on December 8 and 9, 2009 by Dorothy Hains, Utilities Engineer, accompanied by the Company's representative, Paul Taylor (District's Water Plant Operations Supervisor).

The District owns and operates two water systems under Arizona Department of Environmental ("ADEQ") Public Water System ("PWS") Identification Nos. 07-099 and 07-532.

I. PWS No. 07-099

PWS No. 07-099 consists of twenty drinking water wells that have 25,350 gallons per minute ("GPM") combined capacity, and 7.9 million gallons of storage capacity.¹ PWS No. 07-099 has adequate storage and well production to serve its existing customers and reasonable growth. Figures 3A, 3B, 3C, 3D, 3E, 3F, 3G, 3I and 3J provide a process schematic showing both the active and inactive components of this water system.

Table 1 Plant in PWS No. 07-099

Active Drinking Water Wells

New Well #	ADWR No. 55-XXXXXX	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)
1.1	606529	1951	20	900	10	300	1,800
1.2	608176	1958	20	1,090	10	200	1,000
2.1	606532	1954	20	1,000	12	250	1,025
2.2	606530	1948	20	750	12	200	1,500
2.3	606531	1953	16	600	10	125	400
2.4	207783	2005	18	1,120	8	250	900
3.1	606528	1975	16	1,200	14	450	2,450
4.1	606524	1969	16	1,206	10	420	1,250
5.1	217004	2008	18	1,196	12	300	1,724
5.2	606523	1954	20	1,000	12	400	750

¹ This system also consists of one active irrigation well.

5.3	606522	1973	16	1,206	12	400	1,800
5.4	606521	1952	20	1,176	12	350	1,320
5.5	606534	1974	16	1,215	12	400	1,765
6.1	574914	1999	16	1,091	8	250	1,150
6.2	606520	1973	16	1,200	12	450	1,700
6.3	606526	1956	20	1,006	12	400	1,440
6.4	606518	1950	20	910	8	350	800
8.1	536983	1993	16	1,020	12	250	1,150
8.2	606535	1952	20	1,000	12	350	725
8.3	606536	1975	16	1,214	12	400	700

Active Irrigation Water Well

Well #	ADWR No. 55-XXXXXX	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)
30A-N	807594	1998	16	360	8	125	650

Inactive or Capped Drinking Water Wells

Well #	ADWR No. 55- XXXXXX	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Year Drilled	Year disconnected
	606518	20	910	12	None	N/A	1950	2000
	606537	20	N/A	N/A	N/A	N/A	1953	N/A
	608175	14	1,050	10	75	600	1947	2002
	608177	20	1,090	10	200	1,200	1960	2002
	606533	20	1,000	8	200	1,100	1946	2000
5.1	536983	16	1,020	12	250	1,250	1993	2008
	807594	16	N/A	8	125	650	1998	N/A
2.4	608177	18	1,119	8	250	900	1982	2006

- Note: 1. Well #55-606533 was disconnected due to high nitrate contamination.
2. Well #55-60518 which had a poor production rate has been disconnected and converted to a ground water level monitoring well.
3. Well #55-6081077 (Well #2.4) was old Youngtown well. Well casing was corroded, therefore, the District decided to replace this well.

Active Storage, Pumping

Location	Structure or equipment	Capacity
Well #1.1 Site	Booster Pumps	Three 75-HP
	Pressure Tank	One 10,000 gal
	Storage Tank	Two 300,000 gal
Well #2.1 Site	Booster Pumps	Two 75-HP Two 100-HP
	Pressure Tank	One 10,000 gal
	Storage Tank	Three 300,000 gal
Well #3.1 Site	Booster Pumps	Three 100-HP
	Pressure Tank	One 10,000 gal
	Storage Tank	Two 460,000 gal
Well #4.1 Site	Pressure Tank	One 10,000 gal
Well #5.2 Site	Pressure Tank	One 5,000 gal
Well #5.3 Site	Pressure Tank	One 5,000 gal
Well #5.4 Site	Pressure Tank	One 5,000 gal
Well #5.5 Site	Pressure Tank	One 5,000 gal
Plant #5	Booster Pumps	Four 100-HP Four 150-HP
	Pressure Tank	Two 10,000 gal
	Storage Tank	Two 1,250,000 gal
Well #6.1 Site	Booster Pumps	Three 100-HP Three 150-HP
	Pressure Tank	Two 10,000 gal
	Storage Tank	Two 1,250,000 gal
Well #6.2 Site	Pressure Tank	One 5,000 gal
Well #6.3 Site	Pressure Tank	One 5
Well #6.4 Site	Pressure Tank	One 5
Well #8.1 Site	Booster Pumps	One 75-HP Three 100-HP
	Pressure Tank	One 10,000 gal
	Storage Tank	Two 680,000 gal
Well #8.3 Site	Pressure Tank	One 5,000 gal

II. PWS No. 07-532

PWS No. 07-0532 is a new water system; it began providing service to its customers in December 2008. This system consists of two wells that have 1,680 GPM combined capacity, and 1.5 million gallons of storage capacity. Due to lack of water usage data, Staff cannot determine if the system has adequate storage and well production capacity. Figure 3H provide a process schematic showing the active components of this water system

Table 2 Plant in PWS No. 07-532

Active Drinking Water Wells

New Well #	ADWR No. 55-XXXXXX	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)
9.2	205600	2005	18	984	6	200	580
9.3	207076	2005	18	682	8	200	1,100

Active Storage, Pumping

Location	Structure or equipment	Capacity
Plant No. 9 Site	Booster Pumps	Three 60-HP
		Three 100-HP
	Pressure Tank	One 15,000 gal
	Storage Tank	One 1,500,000 gallon concrete tank

Table 3 Combined Plants (for both PWS Nos. 07-099 & 07-532)

Distribution Mains

Diameter (inches)	Material	Length (feet)
18	Various	2,472
16	Various	22,238
14	Various	367
12	Various	219,574
10	Various	121,093
8	Various	251,504
6	Various	818,252
4	Various	159,720
undetermined	Various	21,430

Meters

Size (inches)	Quantity
$\frac{5}{8} \times \frac{3}{4}$	19,555
$\frac{3}{4}$	812
1	520
1½	1,619
2	631
3	25
4	5
6	10
8	2

**C. MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT
("MCESD") COMPLIANCE**

MCESD has determined that both Sun City systems (PWS Nos. 07-099 and 07-532) are currently in compliance with its requirements and is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.²

D. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check of the Commission Utilities Division Compliance database showed there is currently no delinquent compliance items for Sun City Water.

**E. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR")
COMPLIANCE**

The District is in Phoenix Active Management Area ("AMA"). Staff received a Compliance Status Report from ADWR on December 22, 2009. In its report ADWR stated that the Sun City Water is in compliance with its requirements governing water providers.

F. WATER TESTING EXPENSES

The District reported an annual water testing expense of \$7,479 during the test year (See Table 4 and Table 5.). Staff estimated the total annual water testing cost for Sun City Water to be \$14,758. **(See Table 4 & Table 5 – Staff Estimated).**

² Based on MCESD memorandums dated June 17, 2009 and December 21, 2009.

Table 4 Water Testing Cost (Sun City-PWS No. 07 099)

	Co.	Co.	Co.	Staff	Staff	Staff	Staff
Monitoring – 9 POEs (Co.'s)	Cost per test	Co. No. of tests per year	Co.'s Annual Cost	Monitoring –7 POEs	Cost per test	No. of tests per year	Annual Cost
Bacteriological – monthly	\$11	300 ¹	\$3,300 ¹		\$11	480	5,280
Customer requested bact	\$11	12	\$132				
Customer requested HPC	\$35	0	\$0 ¹				
Inorganics – Priority Pollutants			\$0		\$252	1/3	84
Radiochemical – (1/3 yr)							
Gross Alpha	\$60	1 ¹	\$103 ¹		\$60	1 ²	60 ²
Uranium							
Radium 228	\$130	1 ¹	\$224 ¹		\$130	1 ²	130 ²
Radium 226							
Phase II and V:							
IOC's		4	\$0		\$88	4 ²	352 ²
SOC's*		1 1/3	\$0		\$350	1 1/3 ²	466 ²
VOC's*		2	\$0		\$220	2	440
Dioxin	\$500	6 ¹	\$3,000 ¹		\$350	7	2,450
Nitrites* per 9 yrs		1/3	\$0		\$15	0.8	12
Nitrates – annual*		1	\$0		\$25	1 ²	25 ²
Asbestos – per 9 years*		1/3	\$0		\$160	0.8	128
Lead & Copper –Annual*		40	\$0		\$45	30 ²	1,350
TTHM/HHAs –annual*		4	\$0		\$290	4 ²	1,160 ²
Maximum chlorine residual levels	\$20 ¹	36	\$720 ¹		\$20	36	720
Arsenic*		1			\$95	1	95
Total			\$7,479				\$13,762

- Notes: *- The test will be done in the Company's Lab in Belleville.
 - Referenced to Company's Response to Data Request of STF 12.1.
 - Adjustment is based on Company's Response to Data Request of STF 12.1.

Table 5 Water Testing Cost (PWS No. 07 532)

Monitoring – 2 wells (Tests per 3 years, unless noted.)	Co.'s Annual Cost	Cost per test (Staff Ests)	No. of tests per three year period	Total cost per three year period	Annual Cost (Staff Estimates)
Bacteriological – monthly	N/A	\$11	36	\$396	\$132
Inorganics – Priority Pollutants	N/A	\$300	MAP	MAP	MAP
Radiochemical – (1/ 4 yr)	N/A	\$60	MAP	MAP	MAP
Phase II and V:	N/A				
IOC's, SOC's, VOC's	N/A	\$2,805	MAP	MAP	MAP
Nitrites	N/A	\$20	MAP	MAP	MAP
Nitrates – annual	N/A	\$40	3	MAP	MAP
Asbestos – per 9 years	N/A	\$180	1/3	MAP	MAP
Lead & Copper – annual ¹	N/A ¹	\$45	15	\$675	\$225
TTHM/HHAs –Annual ¹	N/A	\$110	3 ²	\$330	\$110
Maximum chlorine residual levels	N/A	\$20	36	\$720	\$240
MAP fees (annual)	N/A				\$289 ²
Total	0				\$996

• Notes:

1. Referenced to Company's Response to Data Request of STF 12.1.
2. Adjustment is based on Company's Response to Data Request of STF 12.1.

	District Reported Costs	Staff Estimated Annual Cost
Grand Total - Table 4 and Table 5 Testing Costs	\$7,479	\$14,758

The District informed Staff that some water testing is performed at Arizona - American Water Company's lab in Belleville and that these costs would be included in the allocation of corporate expenses and as a result were not duplicated in the District's reported testing cost listed above. The District did not identify how much Belleville lab cost would be allocated to the District. Therefore, Staff recommends that the District reported annual water testing cost of \$7,479 be adopted for purposes of this proceeding.

G. WATER USAGE

PWS No. 07-099

Table 6 is the water usage data for PWS No 07-099 reported by the District for the test year of January 2008 through December 2008.

Table 6 Water Usage (PWS No. 07-099)

Month	Number of Customers	Water Sold (gallons)	Water pumped (gallons)	Water purchased (gallons)	Daily Average (gpd/customer)
Jan 08	23,014	285,813,000	291,977,000	0	401
Feb 08	22,987	251,362,000	279,582,000	0	391
Mar 08	23,002	266,997,000	367,144,000	0	374
Apr 08	22,996	311,557,000	397,818,000	0	452
May 08	23,005	372,044,000	474,373,000	0	522
Jun 08	22,999	433,540,000	514,368,000	0	628
Jul 08	22,981	466,447,000	536,322,000	0	655
Aug 08	22,969	481,461,000	516,762,000	0	676
Sep 08	22,955	440,319,000	416,008,000	0	639
Oct 08	22,944	354,599,000	473,125,000	0	499
Nov 08	22,927	418,967,000	438,376,000	0	609
Dec 08	22,935	360,072,000	283,547,000	0	506
total		4,443,178,000	4,989,402,000	0	
Average					529

1. Water Sold

Based on information provided by the District, water use for the year 2008 is presented in Figure 4. The high monthly water use was 676 gallons per day ("GPD") per connection in August, and the low monthly water use was 391 GPD per connection in February. The average annual use was 529 GPD per connection.

2. Non-account Water

Loss water should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, fire fighting, and flushing. During the test year lost water in PWS No. 07-099 was calculated to be 11.1 percent which exceeds Staff's recommended threshold of 10 percent.

The District recognizes that PWS No. 07-099 has excessive water loss³. Per its Response to Data Request STF 11.9, Sun City Water intends to take following actions to reduce water loss in PWS No. 07-099: (1) test and calibrate each production well meter, (2) begin a periodic service meter replacement program, (3) test 3-inch and larger size service meters annually, (4) implement an automatic meter reading program, (5) reduce the amount of water used for flushing wells, (6) implement an employee education and incentive water loss reduction program⁴, (7) implement zero consumption meter read report⁵, (8) verify internal water use data consistency and (9) implement an acoustic leak detection program. The Company had informed Staff that during 2009 water loss in Sun City Water was reduced to 8.9 percent; however the District did not provide the water use data to confirm this reduction.

Staff recommends that the District reduce its water loss to below 10 percent in PWS No. 07-099 by December 31, 2010 or before it files next rate case and/or CC&N and/or financing application whichever comes first. Staff further recommends that the District continue tracking its water loss for three years and submit the data collected every six months. This reporting would begin once a final decision in this matter becomes effective. Staff further recommends that the first report be docketed as a compliance item within 180 days of the effective date of the order issued in this proceeding.

PWS No. 07-532

Because PWS No. 07-532 did not begin providing service until December 2008, there is no water usage data available for the 2008 test.

H. GROWTH

PWS No. 07-099

Figure 5 shows customer growth based on the service connection data contained in the District's annual reports, the number of customers increased from 21,961 at the end of 2002 to 22,935 by the end of 2008, with an average growth rate of 95 customers per year from 2002 to 2008. Based on the linear regression analysis, Staff estimates that the Company could have approximately 23,560 customers by the end of 2013. The following tables summarize Staff projected growth.

³ Reference to the District Witness, Mr. Cole's Direct Testimony.

⁴ Employees are encouraged to report any water theft at fire hydrants or other unmetered location.

⁵ This program identifies and will flag meters used for fire flow and seasonal residences that should have had a zero reading.

Table 7 Actual and Projected Growth

Year	Nos. of Customers	
2002	21,961	Reported
2003	21,899	Reported
2004	22,461	Reported
2005	23,011	Reported
2006	23,041	Reported
2007	23,014	Reported
2008	22,935	Reported
2009	23,178	Estimated
2010	23,273	Estimated
2011	23,368	Estimated
2012	23,463	Estimated
2013	23,558	Estimated

PWS No. 07-532

Because PWS No. 07-532 did not begin providing service until December 2008, there is no historical growth data available for the 2008 test year.

I. DEPRECIATION RATES

Decision No. 70351 (dated May 16, 2008) approved the depreciation rates used by the District in this rate proceeding except that the Company reorganized the authorized rates utilizing the National Association of Regulatory Commissioners' ("NARUC") latest plant account matrix as presented in Figure 6. Staff recommends the depreciation rates presented in Figure 6 by NARUC account.

J. OTHER ISSUES

1. Service Line and Meter Installation Charges

Sun City did not request that its currently authorized meter and service line installation charges be changed in this rate proceeding. Staff recommends that the currently authorized rates continue to be used as shown under the column headings "Staff Recommended" in Table 8.

Table 8 Service Line and Meter Installation Charges

Meter Size	Current Charges (Service line installation)	Current Charge (Meter installation)	Proposed Charges (Service line installation)	Proposed Charge (meter installation)	Staff Recommendation (Service Line)	Staff Recommendation (meter installation)
5/8 x 3/4- inch	\$370	\$130	\$370	\$130	\$370	\$130
3/4-inch	\$370	\$205	\$370	\$205	\$370	\$205
1-inch	\$420	\$240	\$420	\$240	\$420	\$240
1½-inch	\$450	\$450	\$450	\$450	\$450	\$450
2-inch (Turbo)	\$580	\$945	\$580	\$945	\$580	\$945
2-inch (Compound)	\$580	\$1,640	\$580	\$1,640	\$580	\$1,640
3-inch (Turbo)	\$745	\$1,420	\$745	\$1,420	\$745	\$1,420
3-inch (Compound)	\$765	\$2,195	\$765	\$2,195	\$765	\$2,195
4-inch (Turbo)	\$1,090	\$2,270	\$1,090	\$2,270	\$1,090	\$2,270
4-inch (Compound)	\$1,120	\$3,145	\$1,120	\$3,145	\$1,120	\$3,145
6-inch (Turbo)	\$1,610	\$4,425	\$1,610	\$4,425	\$1,610	\$4,425
6-inch (Compound)	\$1,630	\$6,120	\$1,630	\$6,120	\$1,630	\$6,120
Over 6-inch	Equal to actual total cost of installation	Equal to actual total cost of installation	Equal to actual total cost of installation	Equal to actual total cost of installation	Equal to actual total cost of installation	Equal to actual total cost of installation

2. Curtailment Tariff

The Company has an approved curtailment tariff on file with the Commission.

3. Cross Connection & Backflow Tariff

The Company has an approved Cross Connection & Backflow Tariff.

K. PLANT ITEMS IN-SERVICE AT THE TIME OF STAFF'S INSPECTION

PWS No. 07-099

1. Well No.2.4 Replacement

The District abandoned the old Well No. 2.4 (DWR Well No. 55-608177) in 2005 and retired this plant item in 2007. To replace Well No. 2.4, the District installed a replacement well (DWR Well No. 55-207783) this well was placed into service in December 2008 and was in-service at the time of Staff's inspection. The District provided the dollar amounts listed in Table 9.

Table 9 Plant Addition Well No. 2.4 (PWS No. 07-099)

NARUC Acct #	Acct Description	Sub acct (Staff suggested)	Item Description	Arizona-American Water Co. ¹ (\$)	Arizona-American Water Co. Corrections ² (\$)
304	Structure & Improvement				
		304100	Well #2.4 structures		9,285.92
			Subtotal		9,285.92
307	Wells & Spring				
		307000	Well #2.4 (well rehab, initial water quality testing)	1,571,054	190,559.74
			Subtotal	1,571,054	190,559.74
311	Pump Equipment				
		311200	Well pump (900 GPM @ Well #2.4)	96,584	518,104.14
			Subtotal	96,584	518,104.14
334	meters				
		334100	8-inch Well meter (@ Well #2.4)	2,500	
			Subtotal	2,500	
346	Communication Equipment				
		346190	Remote Control & Instrumentation		691,868
			Subtotal		61,868
			Total	807,106	779,817.80

Note: 1. The dollar amounts came from the Arizona-American Water Co's response to STF 11.5.

2. The dollar amounts came from the Arizona-American Water Co.'s response via e-mail on February 26, 2010.

2. Well No.5.1 Replacement

The District abandoned the old Well No. 5.1 (DWR Well No. 55-536983) in 2008 and retired this plant item in 2007. To replace Well No. 5.1, the District installed a replacement well (DWR Well No. 55-217004) this well was drilled in May 2008 and placed into service in December 2008 and was in-service at the time of Staff's inspection. The District provided the dollar amounts listed in Table 10.

Table 10 Plant Addition Well No. 5.1 (PWS No. 07-099)

NARUC Acct #	Acct Description	Sub acct (suggested)	Item Description	Arizona- American Water Co. ¹ (\$)	Arizona- American Water Co. Corrections ² (\$)
304	Structure Improvement				
		304100	Fencing, earth work (@ Well #5.1)	77,563	52,719
			Subtotal	77,563	52,719
307	Wells & Spring				
		307000	Well #5.1 (drilling, design, installation, initial water quality testing)	1,572,854	1,033,841 ³
		307000	Old Well #5.1 (DWR #55606525) abandonment	79,840	79,840
			Subtotal	1,652,694	1,113,681
311	Pump Equipment				
		311200	Well pump (1,740 GPM @ Well #5.1)	208,322	208,322
		311200	Electric (control panels) @ Well #5.1)	114,488	114,488
			Subtotal	322,810	322,810
334	meters				
		334100	12-inch Well meter (@ Well #5.1)	14,214	14,214
			Subtotal	14,214	14,214
346	Communication				

	Equipment				
		346100	SCADA (@ Well #5.1)	87,009	87,009
			Subtotal	87,009	87,009
			Total	2,154,290	1,590,433⁴

Note: 1. The dollar amounts came from the Arizona-American Water Co.'s response to STF 11.7-11.8.

2. The dollar amounts came from the Arizona-American Water Co.'s response via e-mails on February 26 and March 1, 2010.

3. The Arizona-American Water Co. stated that \$1,113,681 expense for Well #5.1 (drilling, design, installation and initial water quality test) included \$798,400 of Cost of Removal. Staff removed \$798,400 from this account.

4. The Arizona-American Water Co. stated that \$1,113,681 expense for Well #5.1 included \$798,400 of Cost of Removal. Staff removed \$798,400 and total expense became \$1,590,433 from \$1,670,273.

3. Well No.6.4 Rehabilitation

Sun City Water Plant No. 6 consists of four wells (Well Nos. 6.1, 6.2, 6.3 and 6.4). Well No. 6.1 produces water that exceeds the arsenic maximum contaminant level ("MCL") MCESD allows Sun City Water to blend water produced by Well No. 6.1 with water from wells with arsenic levels that meet the new MCL requirement. Sun City Water is dependant on the production from Well No. 6.4. Rehabilitation of this well was needed to increase its production. The rehabilitation of Well 6.4 was completed prior to Staff's inspection. Staff observed that Well No. 6.4 was in-service at the time of its inspection. The District provided the dollar amounts listed in Table 11.

Table 11 Plant Addition Well No. 6.4 (PWS No. 07-099)

NARUC Acct #	Acct Description	Sub acct (suggested)	Item Description	Arizona-American Water Co. ¹ (\$)	Arizona-American Water Co. Corrections ² (\$)
304	Structure & Improvement				
		304100	Roofing		1,859
			Subtotal		1,859
307	Wells & Spring				
		307000	Well #6.4 (well rehab, initial water quality testing)	510,627.76	124,569
			Subtotal	510,627.76	124,569
311	Pump				

	Equipment				
		311200	Well pump (800 GPM @ Well #6.4)	108,070	133,924
		311200	Electric (control panels) @ Well #6.4)	123,200	152,674
			Subtotal	231,270	286,598
320.1	Water Treatment Plant				
		320100	Sand separator	36,150	60,601
			Subtotal	36,150	60,601
320.2	Solution Chemical Feeders				
		320200	On-site chlorine (gas) disinfection (@ Well #6.4)	10,396	12,883
			Subtotal	10,396	12,883
334	meters				
		334100	12-inch Well meter (@ Well #6.4)	8,000	9,914
			Subtotal	8,000	9,914
336	Backflow preventor				
		336000	One ¾-inch backflow preventor	200	1,239
			Subtotal	200	1,239
346	Communication Equipment				
		346100	SCADA (@ Well #6.4)	10,462	12,965
			Subtotal	10,462	12,965
			Total	807,106	510,628

Note: 1. The dollar amounts came from the Arizona-American Water Co.'s response to STF 11.6.

2. The dollar amounts came from the Arizona-American Water Co.'s response via e-mail on February 26, 2010.

The District has requested that the PWS No. 07-099 plant items listed above in Tables 9, 10 and 11 be treated as post test year pro forma plant for purposes of this proceeding.

PWS No. 07-532

PWS No. 07-532 is a new water system; it began providing service to its customers in December 2008. The plant items listed below in Table 12 are plant items Staff observed and found to be in-

service at the time of Staff's inspection.⁶ The District provided the dollar amounts listed in Table 12.

Table 12 Additional Plant (PWS No. 07-532)

NARUC Acct #	Acct Description	Item Description	Arizona -- American Water Co. ¹ (\$)	Arizona -- American Water Co. Corrections ² (\$)
303	Land & Land Right	Land & Land Right		88,715
		Subtotal		88,715
304	Structure Improvement			
	304200	Fencing, earth work (@ Plant #9)	716,452	736,677
		Paving (@Plant #9)		13,066
		Buildings (@ plant #9)	660,279	678,916
		HVAC Unit		143,119
		8" piping for HVAC Unit		9,882
		Fire suppression Equipment		46,780
		Manhole/catch basin		24,094
		Electric gate opener		25,890
	304100	Well #9.2 (Earth work, fencing)	271,885	291,194
		Paving (@Well #9.2)		34,179
		Catch basin (Dry Well @Well #9.2)		34,230
		Well #9.3 (Earth work, fencing)	219,606	227,492
		Paving (@Well #9.3)		21,688
		Catch basin (dry Well @Well #9.3)		33,279
		Subtotal	1,868,222	2,320,486
307	Wells & Spring			
		Well #9.2 (drilling, design, installation, initial water quality testing)	1,390,295	417,840
		Well #9.3 (drilling, design, installation, initial water quality testing)	1,431,486	374,105
		Subtotal	2,821,781	791,945
309	Supply Mains			
		Pipes & fittings (@ Well #9.2)		40,980
		Valves (@ Well #9.2)		74,049
		Pipes & fittings (@ Well #9.2)		110,411
		Valves (@ Well #9.2)		60,948
		Subtotal		286,388
310	Power generator			
		One 750 KW/938KVA generator(@ plant #9)	222,355	228,632

⁶ These plant items may have been omitted from plant records submitted with the Sun City Water rate application.

		Subtotal	222,355	228,632
311	Pump Equipment			
		Three 60-HP booster pumps (@ plant #9)	67,421	207,973
		Three 100-HP booster pumps (@ plant #9)	82,936	255,832
		Electric work, control panel (@ plant #9)	549,392	564,901
		Compressor for hydropneumatic tank		41,367
		Pressure Measurement Device		16,651
		Ultrasonic level measurement device		3,528
		Chlorine analytical water monitoring instrument		3,280
		Well pump (492 GPM @ Well #9.2)	98,948	105,562
		Electric (control panels) @ Well #9.2	322,296	343,838
		Measurement device gauge (@ Well #9.2)		3,444
		Well pump (1,000 GPM @ Well #9.3)	118,751	121,764
		Electric (control panels) @ Well #9.3	425,446	436,240
		Measurement device gauge (@ Well #9.3)		2,314
		Subtotal	1,665,190	2,106,694
320.1	Water Treatment Equipment			
	320100	Magnetic meters (@ Plant #9)		15,760
		Subtotal		15,760
320.2	Solution Chemical Feeders			
	320200	On-site sodium hypochlorite generator (@ plant #9)	117,475	120,791
		Subtotal	117,475	120,791
330.1	Storage Tank			
	330100	One 1.5 MG (concrete, underground) storage tank (@ plant #9)	2,021,153	2,078,210
		Subtotal	2,021,153	2,078,210
330.2	Pressure Tank			
	330200	One 1,500 gallon hydro pneumatic tank (@ plant #9)	72,229	74,268
		Yard hydrant/sampling station (@ Well #9.2)		3,651
		Yard hydrant/sampling station (@ Well #9.3)		3,433
		Subtotal	72,229	81,352
331	Mains			
	331100	Mains 4" & less		55,204
	331200	Mains 6" to 8"		48,870
	331300	Mains 10" to 16"		517,858
	331300	valves		89,130
	331400	Mains 18" & greater		76,118
		Subtotal		787,180

334	meters			
	33400	Two 6-inch Well meter (@ Well #9.2)	32,283	34,441
		Two 6-inch Well meter (@ Well #9.3)	32,804	33,636
		Subtotal	65,087	68,077
336	Backflow preventor			
	33600	Three ¾-inch backflow preventors	2,080	2,139
		@ Well #9.2	2,421	2,583
		@ Well #9.3	2,257	2,314
		Subtotal	6,758	7,036
346	Communication Equipment			
		SCADA (@ plant #9)	159,696	164,204
		SCADA (@ Well #9.2)	4,035	4,305
		SCADA (@ Well #9.3)	3,762	3,857
		Subtotal	167,493	172,366
347	Misc Equipment			
	347000	Eye wash/drench		1,069
		Subtotal		1,069
		Total	9,027,743	9,154,701

Note: 1. The dollar amounts came from the Arizona-American Water Co.'s response to STF 11.1-11.4.
2. The dollar amounts came from the Arizona-American Water Co.'s response via e-mail on February 26, 2010.

FIGURE 1

SUN CITY WATER DISTRICT CERTIFICATED AREA

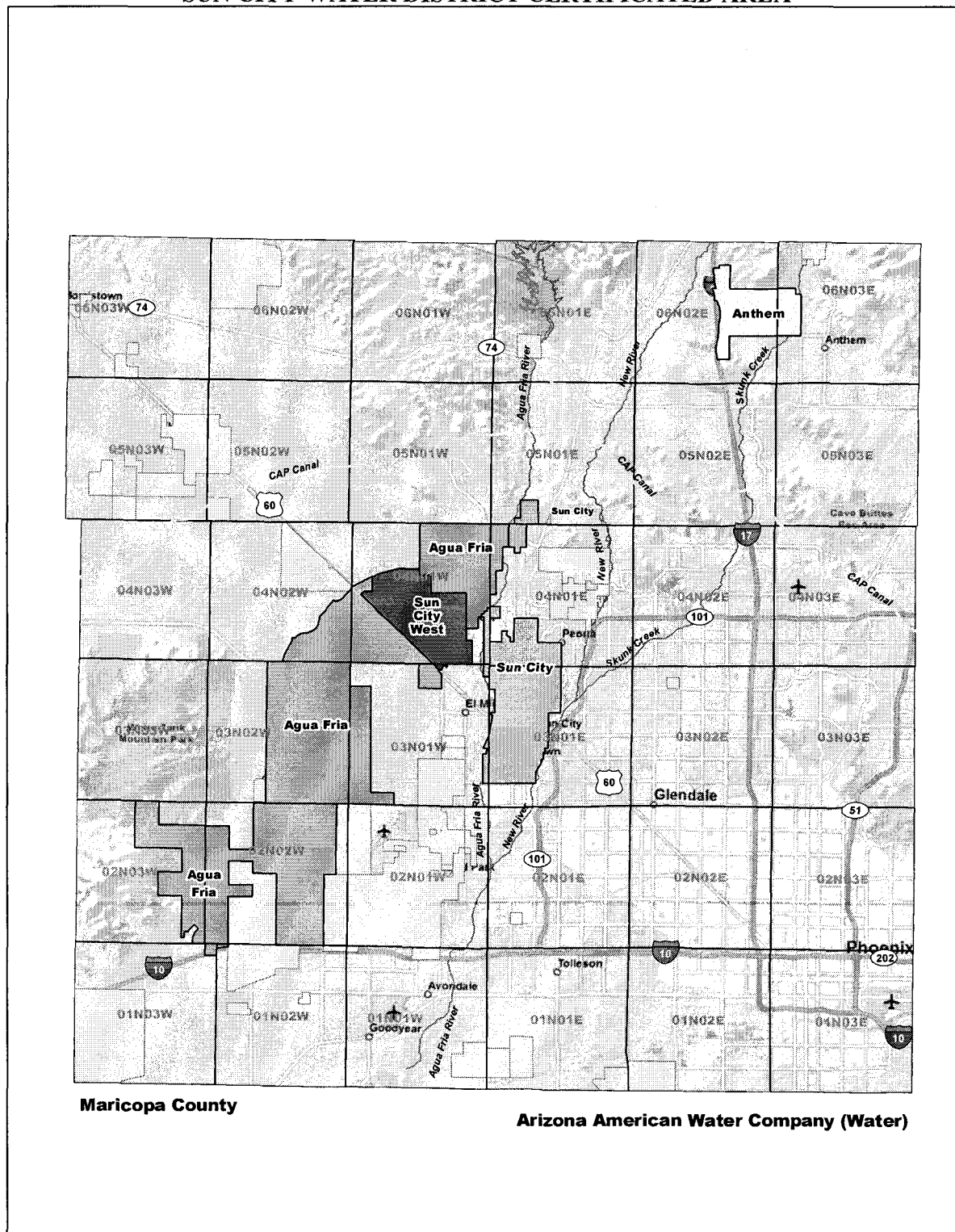


FIGURE 2

LOCATION OF SUN CITY WATER DISTRICT

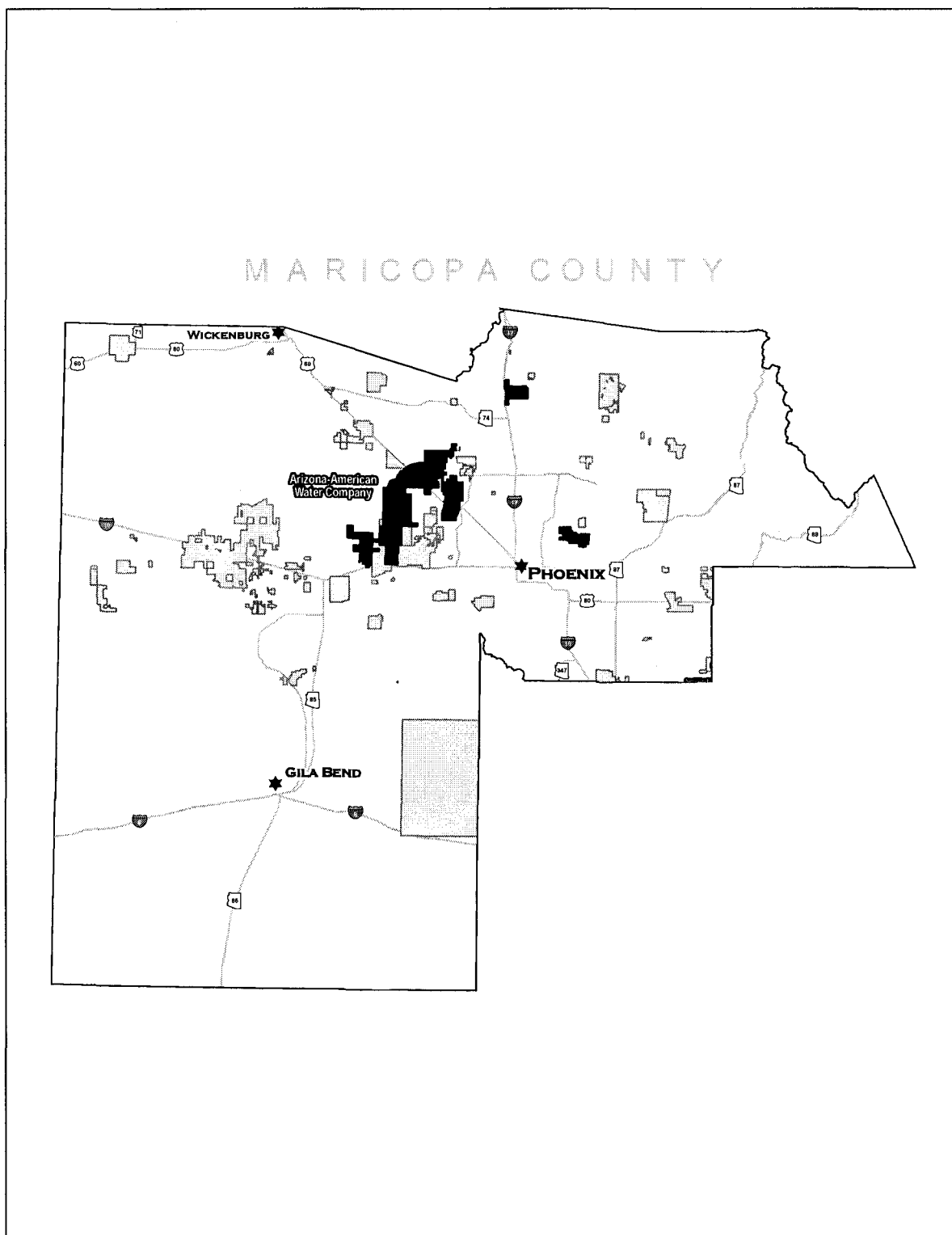


FIGURE 3A
SUN CITY WATER DISTRICT SYSTEMATIC DIAGRAM
FOR EXISTING SYSTEMS

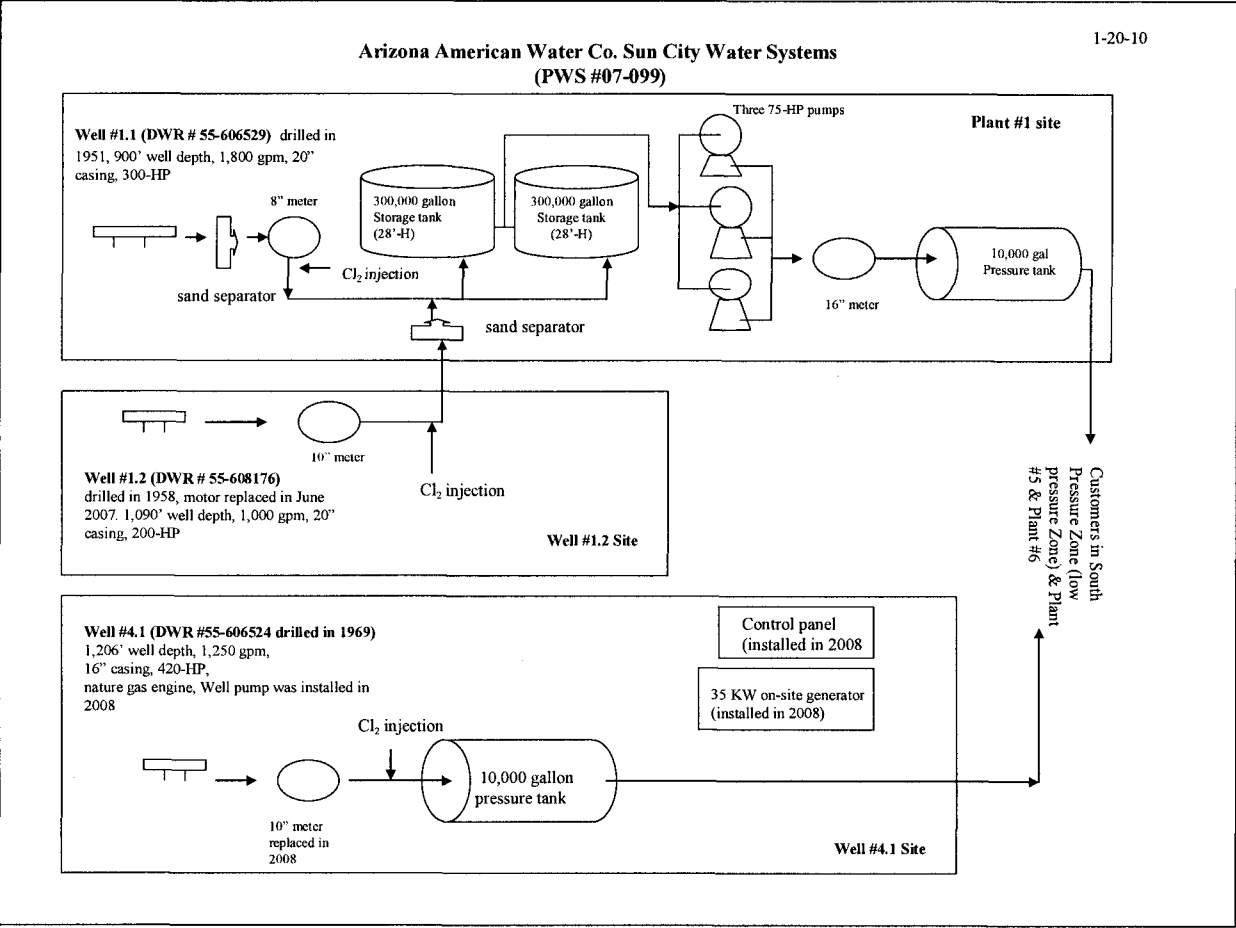


FIGURE 3B
SUN CITY WATER DISTRICT SYSTEMATIC DIAGRAM

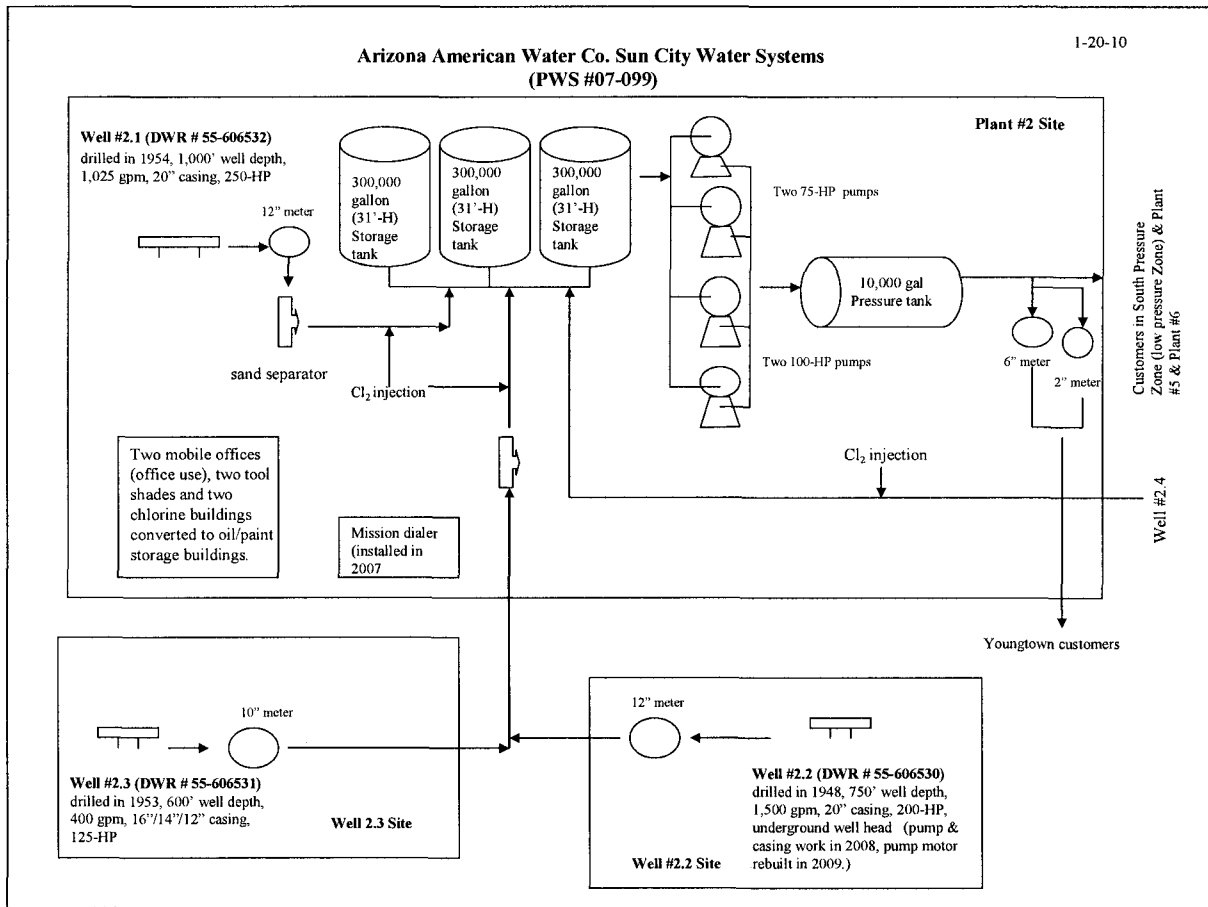


FIGURE 3C

SUN CITY WATER DISTRICT SYSTEMATIC DIAGRAM

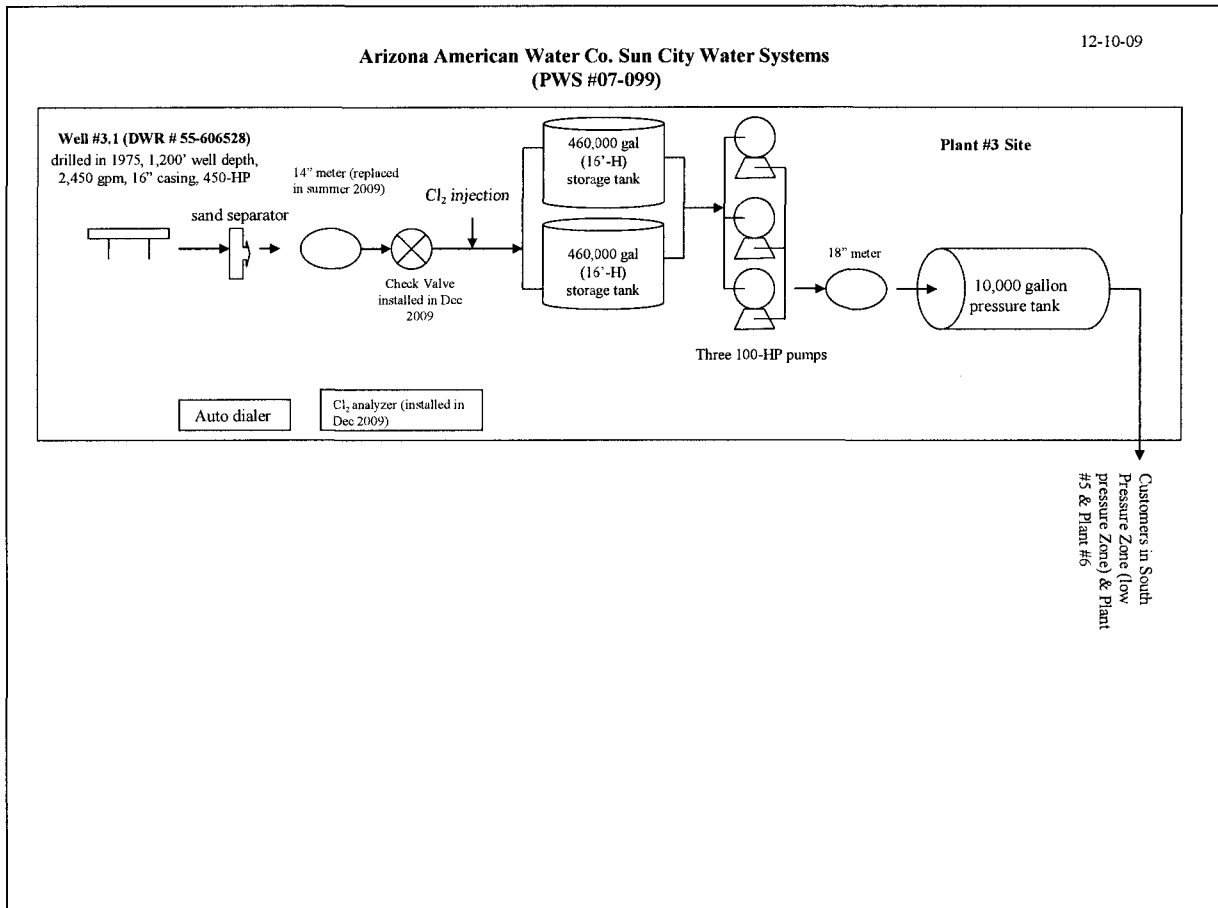


FIGURE 3D

SUN CITY WATER DISTRICT SYSTEMATIC DIAGRAM

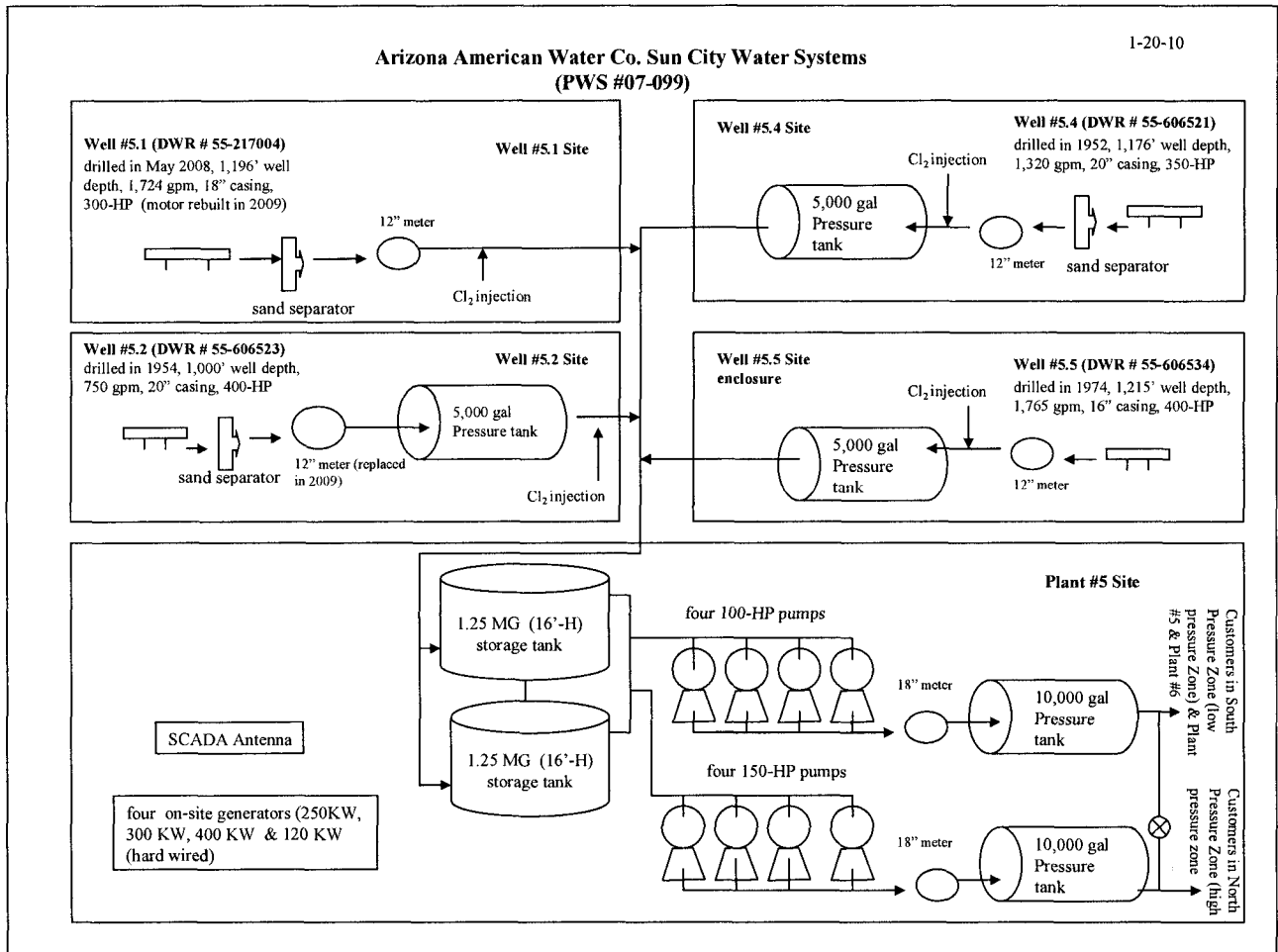


FIGURE 3E

SUN CITY WATER DISTRICT SYSTEMATIC DIAGRAM

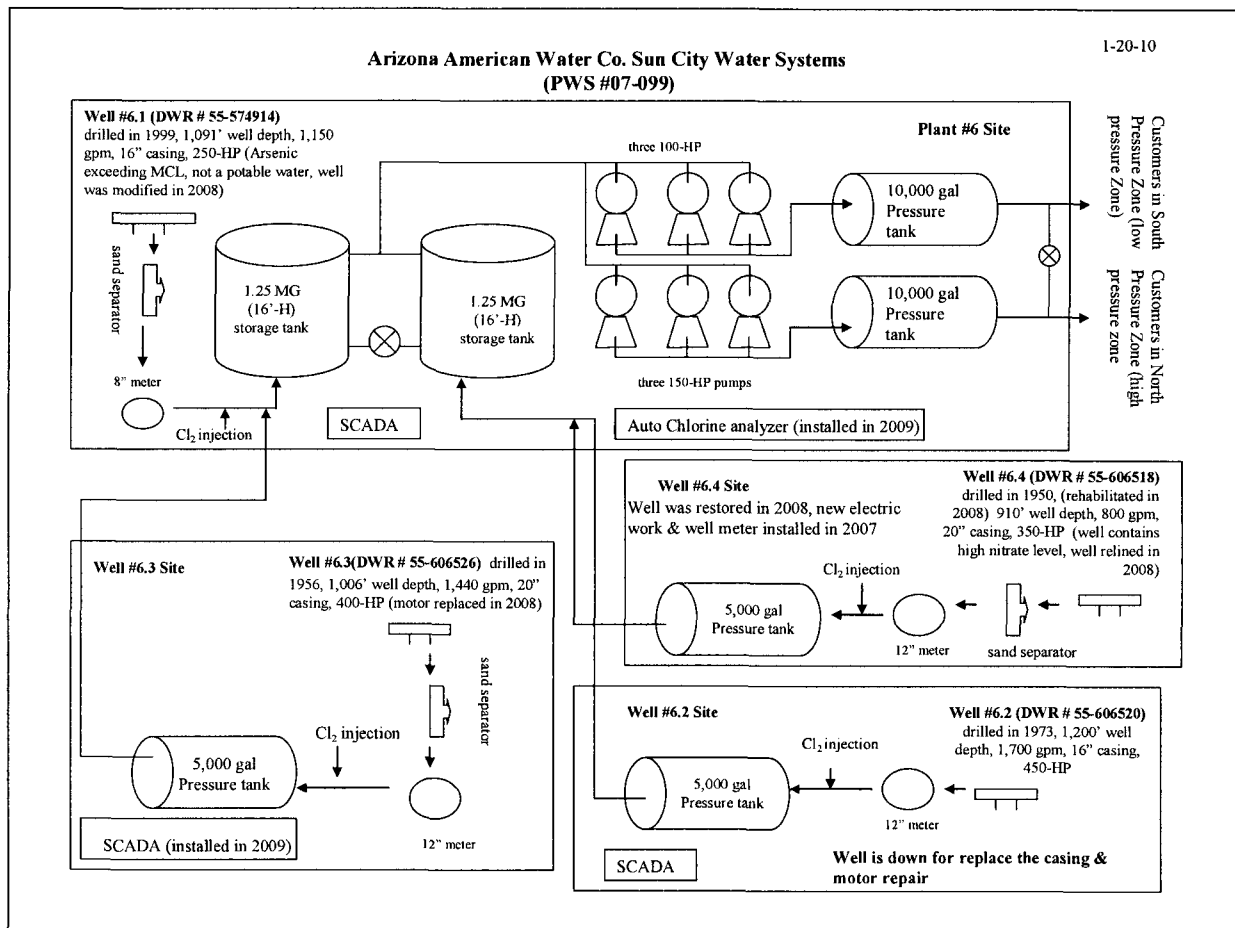


FIGURE 3F

**SUN CITY WATER DISTRICT SYSTEMATIC DIAGRAM
 FOR INACTIVE SYSTEMS**

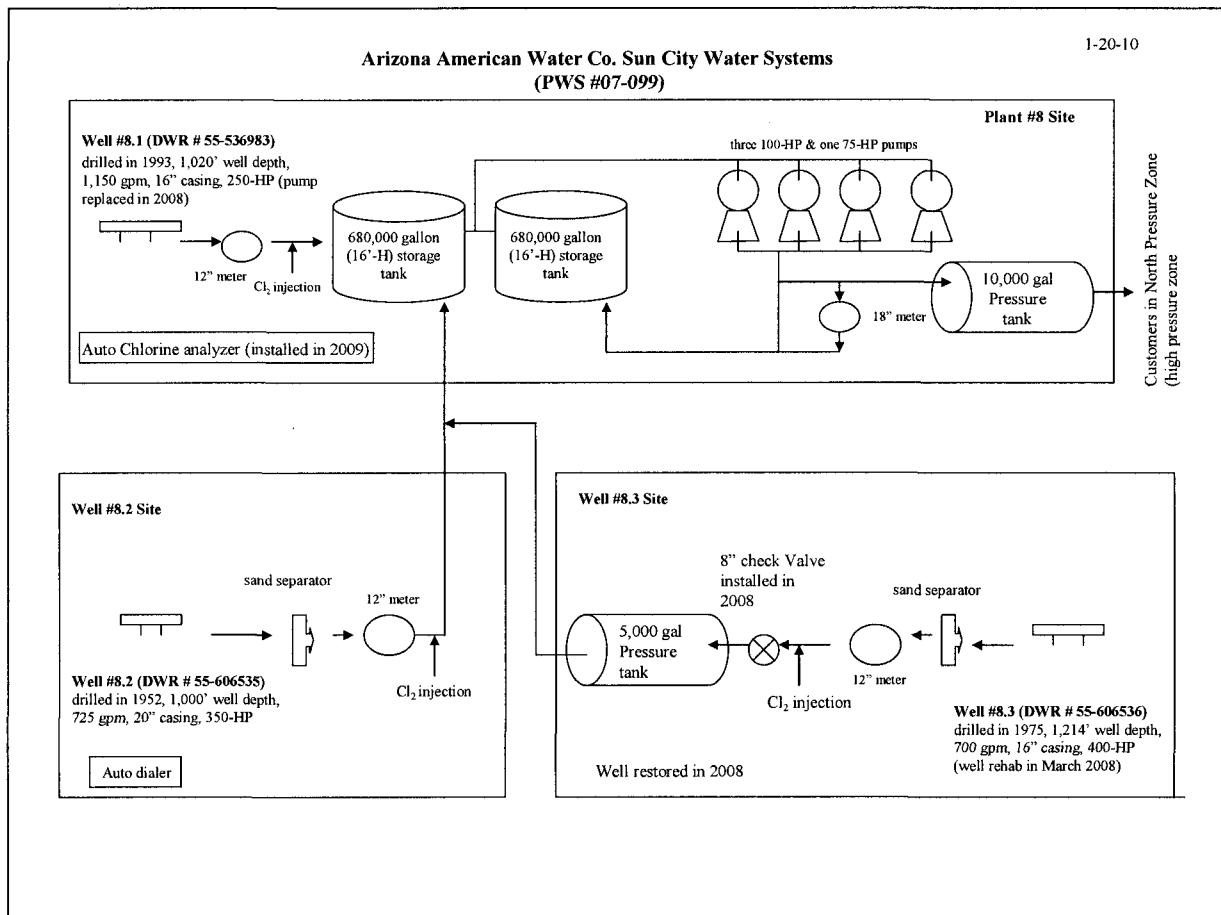


FIGURE 3G

SUN CITY WATER DISTRICT SYSTEMATIC DIAGRAM
FOR INACTIVE SYSTEMS

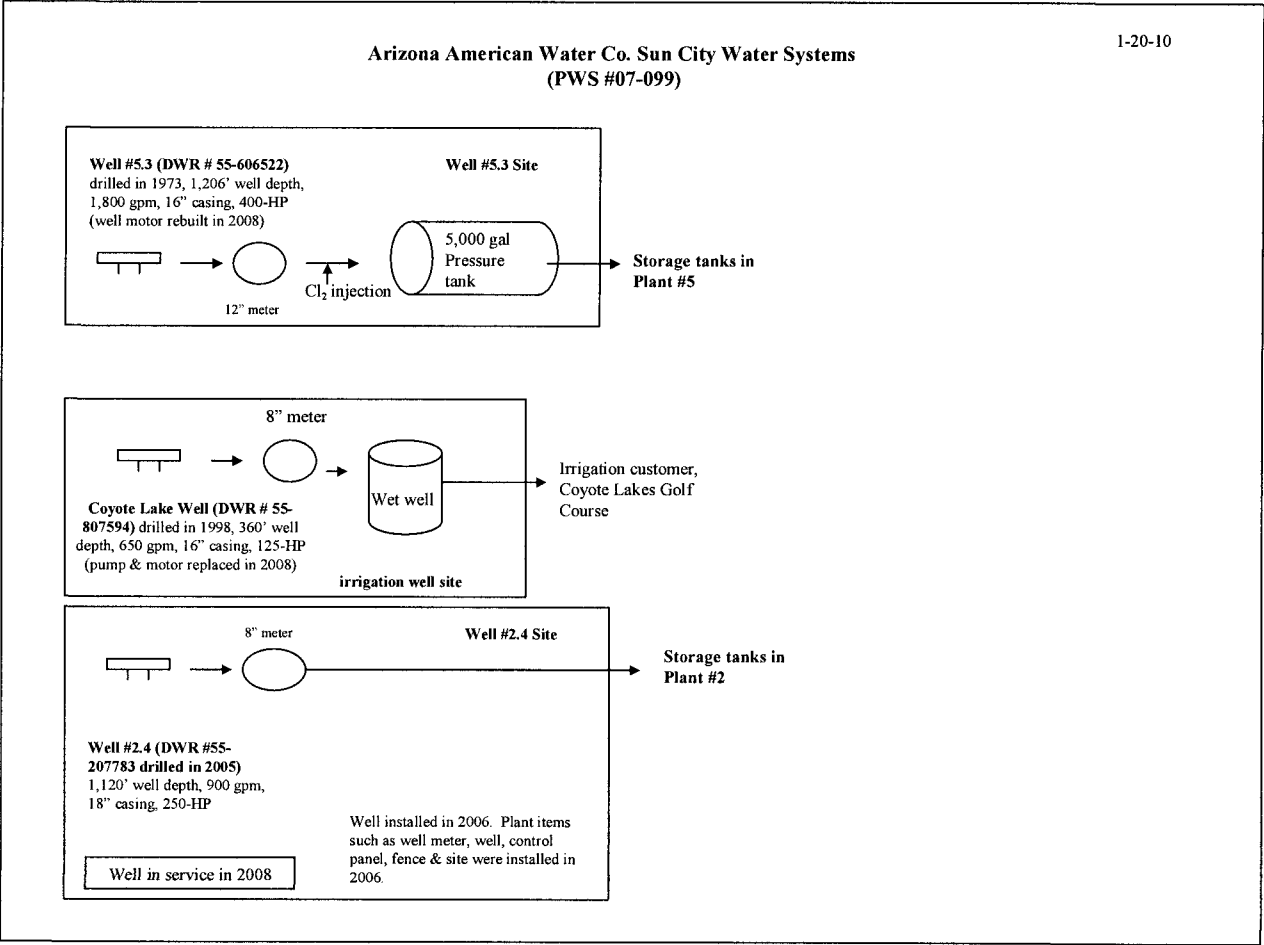


FIGURE 3H

SUN CITY WATER DISTRICT SYSTEMATIC DIAGRAM
FOR INACTIVE SYSTEMS

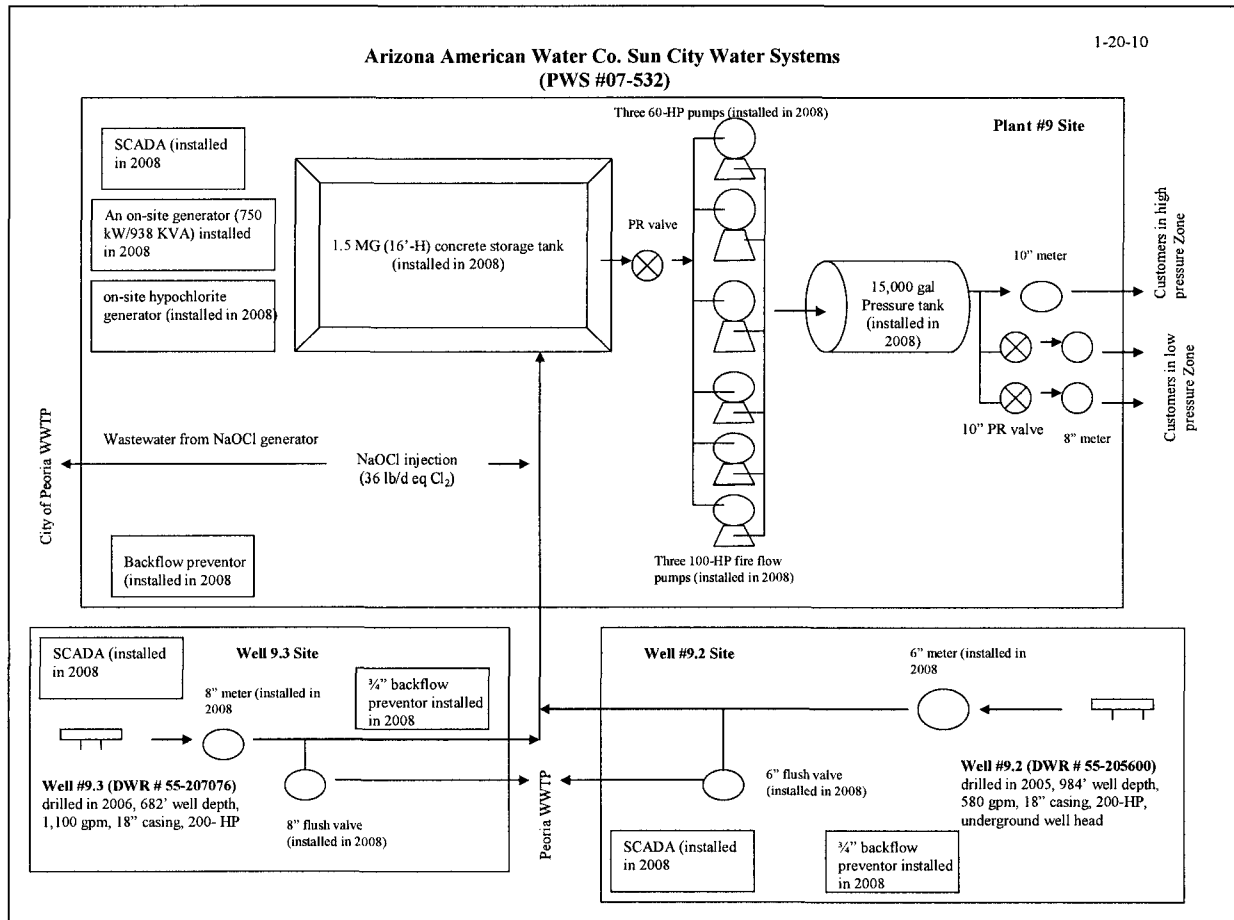


FIGURE 3I

**SUN CITY WATER DISTRICT SYSTEMATIC DIAGRAM
FOR INACTIVE SYSTEMS**

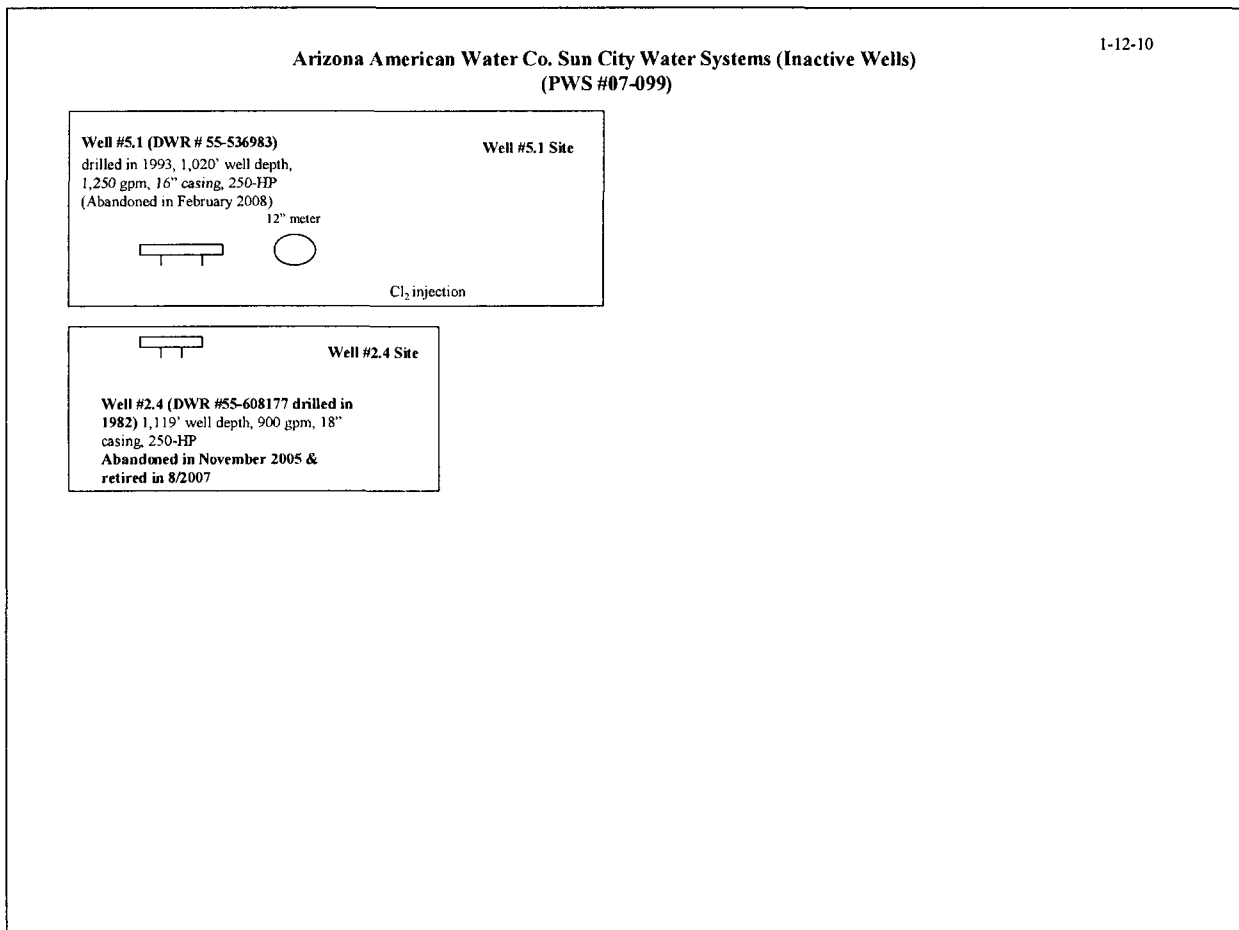


FIGURE 3J

SUN CITY WATER DISTRICT SYSTEMATIC DIAGRAM
FOR INACTIVE SYSTEMS

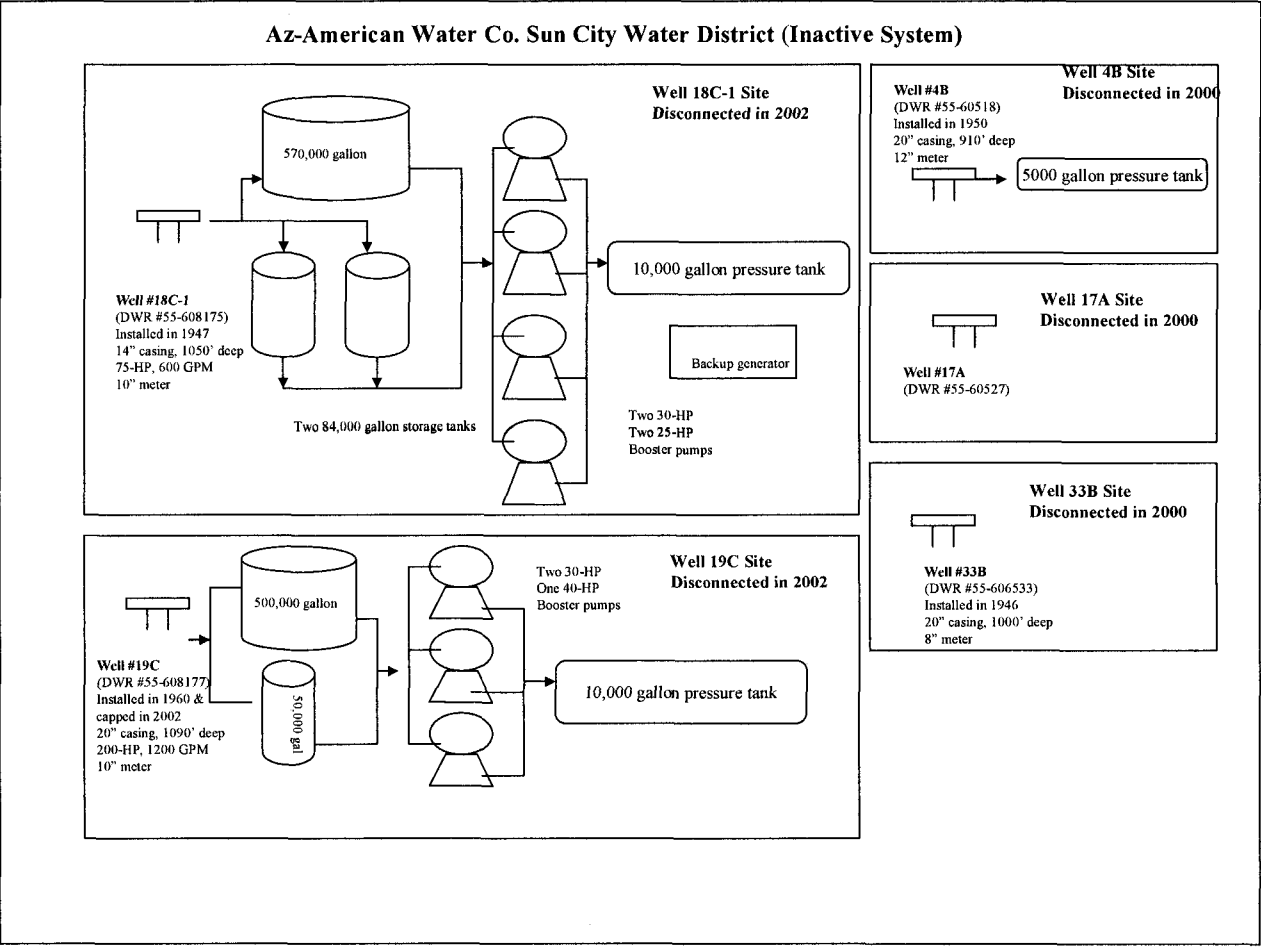


FIGURE 4

SUN CITY WATER DISTRICT WATER USAGE

**During 2008 Test Year Water Usage In Sun City Water District
CC&N Area**

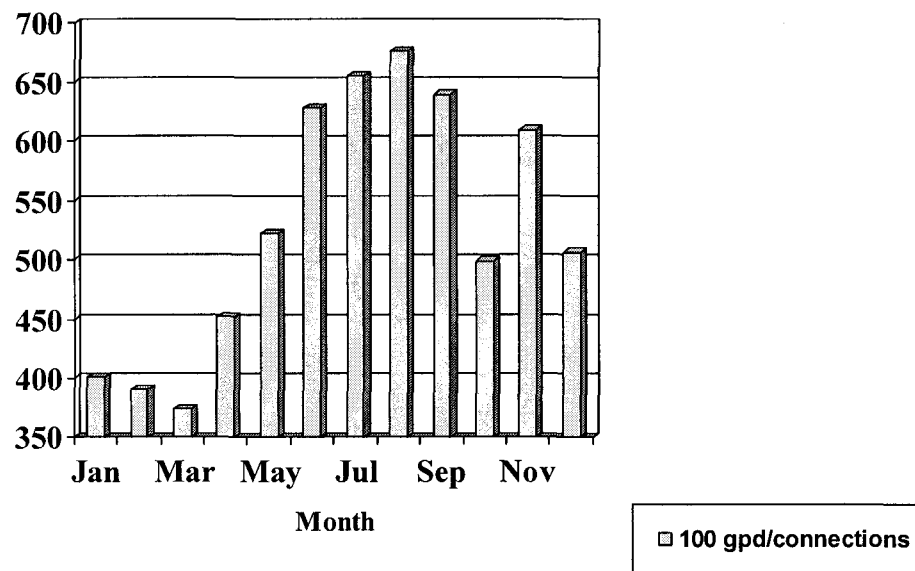


FIGURE 5
GROWTH IN SUN CITY WATER DISTRICT

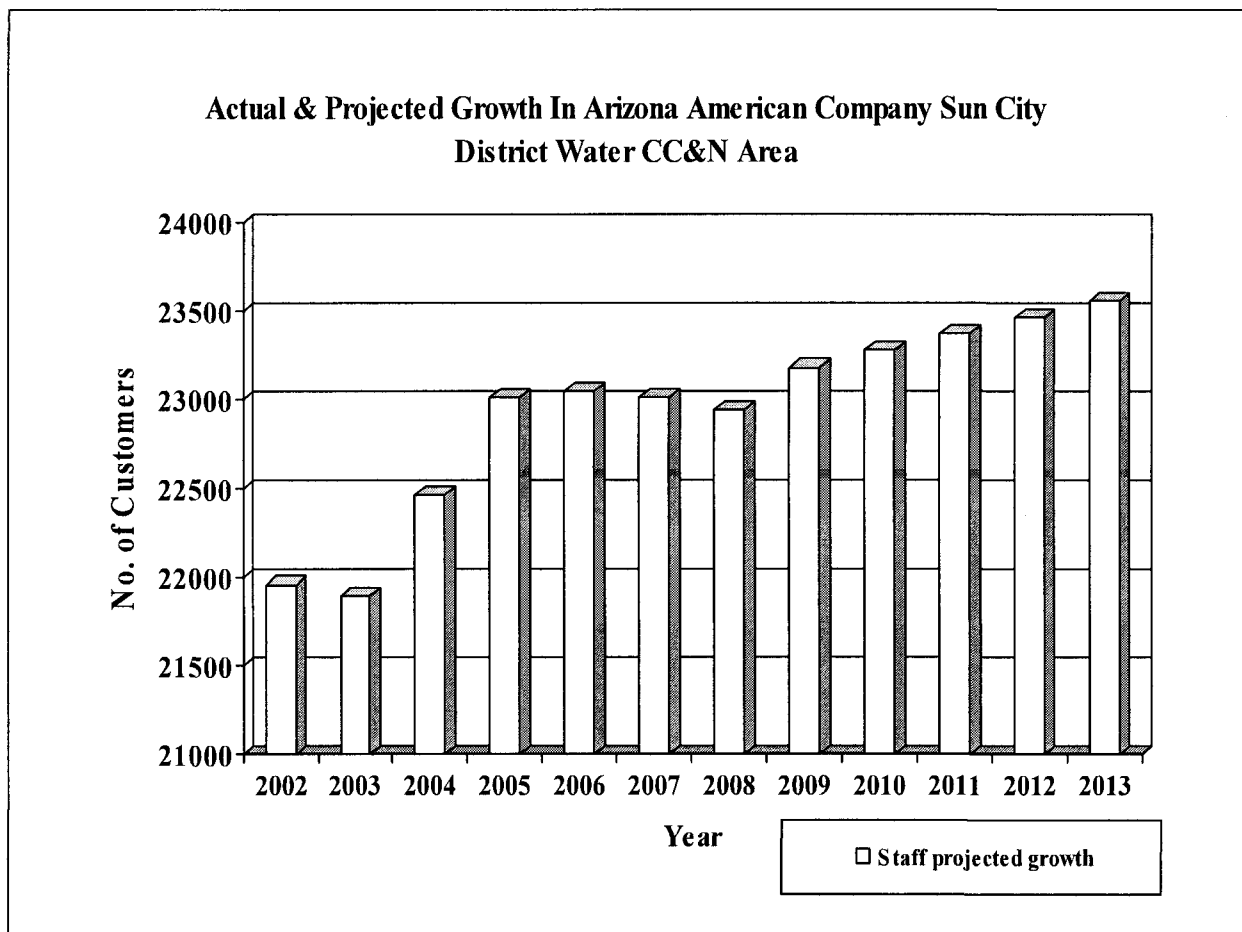


FIGURE 6

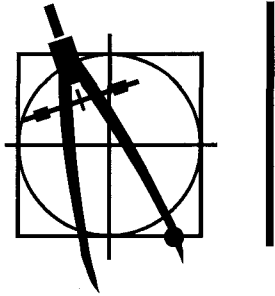
DEPRECIATION RATES FOR SUN CITY WATER DISTRICT

NARUC Acct #	Company's Account #.	Depreciable Plant	Decision # 70351	Rate (%) Sun City Water proposed	Staff Recommended Rate (%)
301	301000	Organization	0	0	0
302	302000	Franchises	0	0	0
303		Land & Land Rights	0		0
	303200	Land & Land Rights SS	0	0	0
	303300	Land & Land Rights P	0	0	0
	303500	Land & Land Right TD	0	0	0
	303600	Land & Land Right AG	0	0	0
304		Structures & Improvements			
	304100	Structure & Improvement SS	2.50	2.50	2.50
	304200	Structure & Improvement P	1.67	1.67	1.67
	304300	Structures and Improvements WT	1.67	1.67	1.67
	304400	Structure & Improvement TD	2.00	2.00	2.00
	304500	Structure & Improvement AG	N/A	3.99 ^{1,2}	3.99
	304600	Structure & Improvement office	4.63	4.63	4.63
	304620	Structure & Improvement Leasehold	N/A	N/A	0
	304800	Structure & Improvement Misc	1.67	1.67	1.67
305	305000	Collection & Impounding reservoirs	2.50	2.50	2.50
307	307000	Wells & Springs	2.52	2.52	2.52
309	309000	Supply Mains	N/A	2.00	2.00
310	310000	Power Generation Equip	4.42	4.42	4.42
	310100	Power Generation Equip Other	N/A	4.42	4.42
311		Pumping Equipment			
	311200	Pump Equipment Electric	4.42	4.42	4.42
	311300	Pump Equipment Diesel	5.00	5.00	5.00
	311400	Pump Equipment Hydraulic	N/A	4.42	4.42
	311500	Pump Equipment Other – pump parts ¹	5.01	5.01	5.01
320		Water Treatment			
	320100	Water Treatment Equipment Non-Media	4.00	7.06 ²	7.06
320.1	N/A	Water Treatment plants			
		Sand separator	N/A	N/A	5.00
320.2	N/A	Solution Chemical Feeders			
		Chlorine (gas) disinfection unit	N/A	N/A	10.00
		On-site Sodium hypochlorite generator	N/A	N/A	5.00 ⁶
330	33000	Distribution Reservoirs & Standpipes	1.67	1.67	1.67
330.1	N/A	Storage Tank			
		concrete underground storage tank	N/A	N/A	1.67 ⁵
330.2	N/A	Pressure Tank			
		hydro pneumatic tank	N/A	N/A	5.00 ⁵
331		Transmission and Distribution			
	331001	TD mains not classified by size	1.53	1.53	1.53
	331100	TD mains 4-inch & less	1.53	1.53	1.53

	331200	TD mains 6-inch to 8-inch	1.53	1.53	1.53
	331300	TD mains 10-inch to 16-inch	1.53	1.53	1.53
	331400	TD mains 18-inch & Grtr	N/A	2.00 ²	2.00
333	333000	Services	2.48	2.48	2.48
334		Meters			
	334100	Meters	2.51	6.67 ²	2.51
	334200	Meter installations	2.51	2.51	2.51
335	335000	Hydrants	2.00	2.00	2.00
336	N/A	Backflow Prevention Devices	6.67	N/A	6.67
339		Other Plant & Misc Equipment			
	339100	Other P/E Intangible	0	0	0
	339500	Other P/E TD ³	2.00	20.00	0.00 ³
340					
	340100	Office Furniture & Equipments	4.59	4.59	4.59
	340200	Computer & periph equipment	4.59	10.00 ²	10.00
	340300	Computer Software	N/A	25.00 ²	25.00
	340310	Computer Software	N/A	25.00 ²	25.00
	340325	Computer Software Custom	N/A	25.00 ²	25.00
	340330	Computer Software other	N/A	25.00 ²	25.00
	340500	Other Office Equip – ice/water machine ¹	N/A	7.13 ¹	7.13
341		Transportation Equipment			
	341100	Transportation Equip, Lt Duty Trucks	25.00	20.00 ²	20.00
	341200	Transportation Equip, heavy Duty Trucks	25.00	15.00 ²	15.00
	341400	Trans Equip – Other – trailer for flatbed backhoe ¹	N/A	16.67	16.67
342	342000	Store Equipments	3.91	3.91	3.91
343	343000	Tools Shop & Garage Equipments	4.02	4.02	4.02
344	344000	Lab equipments	3.71	3.71	3.71
345	345000	Power operated equipments	5.20	5.20	5.20
346		Communication Equipments			
	346100	Communication Equip non-telephone	10.30	10.30	10.30
	346190	Remote Control & Instrument	10.30	10.30	10.30
	346200	Communication Equip - Telephone	10.30	10.30	10.30
	346300	Communication Equip Other	4.93	4.93	4.93
347	347000	Misc Equipment	0.0	6.19 ⁴	6.19

Notes:

1. per the District's response to Data Request STF 14.1-14.7.
2. Referred to Decision #71410.
3. This account is for easement/right of way, the depreciation rate should be 0%.
4. According to the District, this account only includes an eye wash drench for Well #5.1 that was in service in May 2009.
5. Reference to the approved depreciation rate for Sun City West Water District in Decision # 71410.
6. Reference to the approved depreciation rate for Paradise Valley Water District in Decision # 71410.



**Engineering Report for Arizona-
American Water Company, Anthem
Wastewater District (Rates)
Docket No. WS-01303A-09-0343
By Dorothy Hains, P.E.
March 1, 2010**

EXECUTIVE SUMMARY

CONCLUSIONS

1. The Arizona - American Water Company Anthem Wastewater District ("Anthem Wastewater") is in full compliance with the Arizona Department of Environmental Quality ("ADEQ") for operation and maintenance, operator certification and discharge permit limits. (See §E of the report for discussion and details.).
2. Staff concludes that the Anthem Wastewater treatment plant has adequate capacity to treat the existing customers and reasonable growth in the Anthem Wastewater service area. (See § C of the report for discussion and details.)
3. A check of the Arizona Corporation Commission Utilities Division Compliance database showed there is currently no delinquent compliance item for the Anthem Wastewater. (See § F of the report for discussion and details.)
4. Staff concludes that the Anthem Wastewater Treatment Plant Headwork Modification project had been completed and is in service. Staff further concludes that the project was used and useful at the time of Staff's inspection. (See § H of the report for discussion and details.)

RECOMMENDATIONS

1. It is recommended that the Anthem Wastewater use depreciation rates as delineated in Figure 5. (See § H and Figure 5 of the report for discussion and details.)
2. Staff recommends an annual testing cost of \$62,642 for the Anthem Wastewater. (See § H of the report for discussion and details.)
3. Staff recommends \$30,900 be reclassified from the Structure and Improvement for Water Treatment Account No. 354200 to the Waste Water Power Generation Equipment Account No.355500. (See § H of the report for discussion and details.)

4. Staff recommends \$4,000 be reclassified from the Structure and Improvement for Water Treatment Account No. 354200 to the Waste Water Electric Pump Equipment Account No.371100. (See § H of the report for discussion and details.)
5. Staff recommends that the current Anthem Wastewater OFHF tariff be replaced with the attached modified OFHF tariff (See Figure 6). Staff further recommends that the District be required to comply with the Status Reporting Requirements contained in Paragraph J immediately. (See § H of the report for discussion and details.)

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A. LOCATION OF DISTRICT

Arizona American – Anthem Wastewater District (“Anthem Wastewater” or “District”) serves approximately 8,000 customers in Anthem, an unincorporated community which is adjacent to the town of New River which is located north of the City of Phoenix (“Phoenix”) in Maricopa County. Figure 1 describes the location of the District within Maricopa County, and Figure 2 describes the CC&N area of the District.

B. DESCRIPTION OF THE WASTEWATER SYSTEM

The plant facilities were visited on September 29, 2009 by Dorothy Hains, Utilities Engineer, in the accompaniment of Jeff Marlow, Wastewater Operation Manager and Larry Berry, Water Quality Specialist.

The wastewater system consists of a 3 million gallon per day (“MGD”) extended aeration treatment plant functions include grit removal, nitrification/denitrification, Zenon filtration, and disinfection/dechlorination. After dewatering, dry sludge is disposed of at a landfill. After it is mixed with untreated CAP water and rejected water from Anthem Water Treatment Plant, the treated effluent is pumped to a golf course pond for irrigation use and a ground water recharge facility for disposal.¹

Figures 3A and 3B are schematics of the system. The following tables describe the system in more detail.

Table 1. Anthem Wastewater Facilities

Anthem Wastewater Treatment Plant

Process	Equipment
headwork	Flow measuring, Grit chamber, Bar screen, Odor control devices
Treatment	Activated sludge, Anoxic/aerobic (nitrification /denitrification), Equalization tank
Filtration	Zenon Filters
Disinfection	Hypochlorite Injection at filter effluent & UV
dechlorination	Sodium bisulfite injection
Effluent disposal	Surface impoundments
Sludge Disposal	Aerobic digester, sludge thickening, settling and decanting clear liquid, Polymer as flocculants to aid in dewatering, Belt press for dewatering, Dewatered sludge transport bins
Solids disposal	Landfill

Lift Station (LS”) Facilities

¹ The effluent is held in a 1 MGD lined pond prior to being pumped to the golf course and recharge facility.

Location	No. Pumps	Pump (HP)	Capacity (gallons per minute per pump)	Wet Well Capacity (gallons)
Panhandle #1 LS (38955 N Gavilan Peak PKWY, Anthem)	2	7½	494	10,500
Panhandle #2 LS (38302 N Gavilan Peak PKWY, Anthem)	2	23	500	5,200
Panhandle #3 LS (Anthem)	2	5	300	16,700
Reject water LS (in the Anthem WWTP)	2	20	1,400	6,500
Inflow LS (in the Anthem WWTP)	4	30	2,932	9,700

Force Mains

Size (in inches)	Material	Length (feet)
4	Ductile Iron Pipe (“DIP”)	5,622
6	DIP	3,499
8	DIP	81
18	DIP	9,276

Collection Mains

Size (in inches)	Material	Length (feet)
4	Polyvinyl chloride (“PVC”)	N/A
6	PVC	4,820
8	PVC	411,323
10	PVC	23,871
12	PVC	19,572
15	PVC	3,224
18	PVC	9,933
21	PVC	2,170
24	PVC	1,070
30	PVC	0
Undetermined	PVC	18,831

Manholes & Cleanouts

Type	Quantity
Standard Manhole	1,909
Cleanouts	198

Services

Size (in inches)	Material	Length (feet)
4	PVC	7,917
6	PVC	90
8	N/A	N/A
12	N/A	N/A
15	N/A	N/A

C. WASTEWATER FLOW

Table 2 below summarizes the wastewater flow data in the District during the test year and Figure 4 is a graphic illustration of the same flow data. During this period, the District experienced a daily average wastewater flow of 203 gallons per day (“gpd”) per connection, a high wastewater flow of 219 gpd per connection in February, and a low wastewater flow of 186 gpd per connection in July. The peak month is January; a total of 52,681,000 gallons of wastewater was collected from 8,059 connections in January. The low flow month is June; a total of 45,534,000 gallons of wastewater was collected from 8,017 customers in this month.

Table 2 Wastewater Flow

Month	Number of Connections	Total Volumes of Treated Wastewater (gallons)	Daily Average Flow (gallons/day)	Peak Day Flow (gallons)	Daily Average Flow (gal/day/customers)
Jan	8,059	52,681,000	1,699,387	2,074,000	211
Feb	8,049	49,287,000	1,760,250	2,345,000	219
Mar	8,042	52,634,000	1,697,871	1,950,000	211
Apr	8,021	50,284,000	1,676,133	1,943,000	209
May	8,017	50,208,000	1,619,613	1,947,000	202
Jun	8,017	45,534,000	1,517,800	2,051,000	189
Jul	8,014	46,309,000	1,493,839	1,757,000	186
Aug	8,008	48,690,000	1,570,645	1,971,000	196
Sep	8,001	48,353,000	1,611,767	1,911,000	201
Oct	8,022	50,949,000	1,643,516	2,052,000	205
Nov	8,009	50,542,000	1,684,733	2,188,000	210
Dec	8,013	51,654,000	1,666,258	2,172,000	208
Average					203

Staff concludes that the District’s treatment plant has adequate capacity to serve existing customers and reasonable growth.

D. GROWTH

Based on the service connection data in the Company's annual reports, the number of customers in the District decreased from 12,027 at the end of 2006 to 8,013 by the end of 2008. In its 2005 Annual Report the District reported that customers in Agua Fria had been included in the Anthem customer counts, Staff believes the significant decline in customers in 2006 is the result of a change in reporting. With only two years of useful data, Staff can not project the growth rate for Anthem Wastewater. The following table summarizes actual growth in the District's existing certificated service area.

Table 3 Actual Growth

Year	Nos. of Customers	
2002	N/A	Reported
2003	N/A	Reported
2004	N/A	Reported
2005	9,289 ¹	Reported
2006	12,027	Reported
2007	8,076	Reported
2008	8,013	Reported

Note: 1. This number includes total of Anthem customers and Agua Fria customers

E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

ADEQ and Maricopa County Environmental Services Department ("MCESD") regulate the wastewater system under Wastewater Facility No. 103259 and Aquifer Protection Permit ("APP") No. P103259, Reuse Permit No. R103259 and National Pollutant Elimination System ("NPDES") Permit No. 36218. Per the March 18, 2008 Compliance Status Report issued by ADEQ, the system is in full compliance for operation and maintenance, operator certification and discharge permit limits.

F. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check of the Commission Utilities Division Compliance database showed there is currently no delinquent compliance item for the District.

G. DEPRECIATION RATES

Decision No. 70372 (dated June 13, 2008) approved the depreciation rates used by the District in this rate proceeding except that the District reorganized the authorized rates utilizing the National Association of Regulatory Commissioners' ("NARUC") latest plant account matrix as presented in Figure 5. Staff recommends the depreciation rates presented in Figure 5 by NARUC account.

H. OTHER ISSUES

1. Chemical Testing Expenses

The District reported an annual water testing expense for Anthem Water of \$62,642 during the test year. Staff estimated the total annual water testing cost for the District to be is \$64,693 (See Table 4 - Testing Cost for Anthem Wastewater District – APP #P-103259 and Table 5 - Testing Cost for Anthem Wastewater District – NPDES #AZ0025429).

Table 4 Testing Cost for Anthem Wastewater – APP #P-103259

Monitoring – Discharge	No. of tests per year	Cost per test (Company's)	Cost per test (Staff estimated)	Company Reported Total Costs	Staff Estimated Annual Cost
Bacteriological – Fecal Coliform (single sample maximum) –daily monthly	365	\$15	20	\$5,475 ¹	7,300
Bacteriological – Fecal Coliform (4 of the last 7 samples) –daily	365	\$35	20	\$12,775 ¹	7,300
Bacteriological – enteric virus (4 of the last 7 samples) – monthly	12	\$525 ¹	575	\$6,300 ¹	6,900
pH - daily	365	(in house) ¹	15	\$0 ¹	5,475
Turbidity - daily	365	(in house) ¹	15	\$0 ¹	5,475
Turbidity - continuous	N/A	(in house) ¹	0	\$0 ¹	0
Total Nitrogen (Sum of nitrite, nitrate and TKN) - monthly	12	\$88 ¹	0	\$1,056 ¹	0
Nitrate & Nitrite as N - monthly	12	\$25 ¹	25	\$300 ¹	300
Total Kjeldahl Nitrogen (TKN) - monthly	12	\$40 ¹	40	\$480 ¹	480
Total Metals (Inorganics – Priority Pollutants including fluoride & free cyanide) - quarterly	4	\$410 ¹	252	\$1,644 ¹	1,008
Lead - quarterly	4	\$32 ¹	34	\$128 ¹	136
VOCs - quarterly	4	\$280 ¹	220	\$1,120 ¹	880
Arsenic – quarterly	4	\$32 ¹	105	\$128 ¹	420
Total				29,406¹	35,422

Note: 1. Based on the Company Response to Data Request No. STF 6.6

Monitoring – Ground Water (one monitoring well)	No. of tests per year	Cost per test (Company's)	Cost per test (Staff estimated)	Company Reported Total	Staff Estimated Annual Cost
---	-----------------------	----------------------------	---------------------------------	------------------------	-----------------------------

				Costs	
Total Dissolved Solids (TDS) – quarterly	4 ¹	\$15 ¹	35	60 ¹	140
Total Nitrogen (Sum of nitrite, nitrate and TKN) - quarterly	4 ¹	\$88 ¹	0	352 ¹	0
Nitrate as N - quarterly	4 ¹	\$40 ¹	40	160 ¹	160
Nitrite as N - quarterly	4 ¹	\$15 ¹	25	60 ¹	100
Nitrate-nitrite as N - quarterly	4 ¹	\$25 ¹	0	100 ¹	0
Total Metals (Inorganics – Priority Pollutants including fluoride) - quarterly	4 ¹	\$411 ¹	252	1,644 ¹	1,008
Lead - quarterly	4 ¹	\$32 ¹	13	128 ¹	52
VOCs - quarterly	4 ¹	\$280 ¹	220	1,120 ¹	880
Arsenic – quarterly	4 ¹	\$32 ¹	105	128 ¹	420
Total				3,752 ¹	2,760

Note: 1. Based on the Company Response to Data Request No. STF 6.6

Table 5 Testing Cost for Anthem Wastewater – NPDES #AZ0025429

Monitoring – Effluent Character)	No. of tests per year	Cost per test (Company's)	Cost per test (Staff estimated)	Company Reported Total Costs	Staff Estimated Annual Cost
Temperature – quarterly	4	N/A ¹	N/A	N/A	N/A
Oil and grease - quarterly	4	\$100 ¹	110	400 ¹	440
Total residual chlorine TRC – quarterly	4	(in house) ¹	20	0 ¹	80
Phosphorus - quarterly	4	40 ¹	20	160 ¹	80
Dissolved oxygen – quarterly	4	(in house) ¹	20	0 ¹	80
Total Dissolved Solids - quarterly	4	15 ¹	17	60 ¹	68
Total Kjeldahl Nitrogen (TKN) - quarterly	4	40 ¹	40	160 ¹	160
Nitrate & Nitrite as N - quarterly	4	88 ¹	25	352 ¹	100
Antimony – Annually Beryllium – Annually Cadmium - Annually	1	96 ¹	104	96 ¹	104
Total Chromium - annually	1	82 ¹	50	82 ¹	50
Pesticides/PCB/Unreg/SOC	1 ¹	550 ¹	0	550 ¹	0

VOC	1	N/A	445	0 ¹	445
SOC	1	N/A	375	0 ¹	375
EDB & DBCP - annually	1 ¹	160 ¹	0 ²	160 ¹	0 ²
Group I – alachlor, etc. - annually	1 ¹	200 ¹	0 ²	200 ¹	0 ²
Group II – Aldrin, etc. - annually	1 ¹	200 ¹	0 ²	200 ¹	0 ²
Group III – 2,4 D, etc. - annually	1 ¹	180 ¹	0 ²	180 ¹	0 ²
Group IV – Benzo(a)pyrene, etc. - annually	1 ¹	200 ¹	0 ²	200 ¹	0 ²
Group V – aldicarb, etc. -- annually	1 ¹	200 ¹	0 ²	200 ¹	0 ²
Pesticides	1	N/A	140	N/A	140
Herbicides	1	N/A	385	N/A	385
TTHMs - annually	1	100 ¹	355	100 ¹	355
Glyphosate – annually	1 ¹	180 ¹	0 ²	180 ¹	0 ²
Endothall - annually	1 ¹	180 ¹	0 ²	180 ¹	0 ²
Diquat - annually	1 ¹	180 ¹	0 ²	180 ¹	0 ²
Dioxin – annually	1 ¹	650 ¹	0 ²	650 ¹	0 ²
Sulfides -annually	1	25 ¹	25	25 ¹	25
Total suspended solids - annually	1	15 ¹	17	15 ¹	17
Arsenic – annually	1	32 ¹	105	32 ¹	105
WET test – effluent toxicity	4 ¹	3,000 ¹	3,000	12,000 ¹	12,000
Total				16,362¹	15,009

Note: 1. Based on the Company Response to Data Request No. STF 6.6
 2. The cost is included in SOC expense.

Monitoring – Outfall 004	No. of tests per year	Cost per test (Company's)	Cost per test (Staff estimated)	Company Reported Total Costs	Staff Estimated Annual Cost
Chromium – monthly	12	296 ¹	104	3,552 ¹	1,248
Chromium VI – monthly					
Copper – monthly					
selenium - monthly	12	55 ¹	55	660 ¹	660
Cyanide - monthly					
Hardness - monthly					
Total				4,500¹	2,220

Note: 1. Based on the Company Response to Data Request No. STF 6.6

Monitoring – (Outfall 001)	No. of tests per year	Cost per test (Company's)	Cost per test (Staff estimated)	Company Reported Total Costs	Staff Estimated Annual Cost
Total residual chlorine TRC – weekly	52	(in house) ¹	20	0 ¹	1,040
pH -weekly	52	(in house) ¹	15	0 ¹	780
Copper – monthly Zinc – monthly selenium - monthly Silver – monthly Total Chromium - monthly	12	270 ¹	104	3,240 ¹	1,248
Cyanide - monthly	12	55 ¹	55	660 ¹	660
Chromium VI - monthly	12	62 ¹	50	744 ¹	600
Hardness - monthly	12	24 ¹	26	288 ¹	312
Total				4,932 ¹	4,640

Note: 1. Based on the Company Response to Data Request No. STF 6.6

Monitoring – (Outfall 002)	No. of tests per year	Cost per test (Company's)	Cost per test (Staff estimated in \$)	Company Reported Total Costs	Staff Estimated Annual Cost
BOD ₅ – bi-monthly	24	\$45	48	1,080 ¹	1,152
BOD – bi-monthly	24	\$45	58	1,080 ¹	1,392
E coli – weekly	12	\$35	70	420 ¹	840
Total suspended solids – 1/every two weeks	26	\$15	17	390 ¹	442
Total suspended solids (inflow & effluent) – two/month	48	\$15	17	720 ¹	816
Total				3,690 ¹	4,642

Note: 1. Based on the Company Response to Data Request No. STF 6.6

				Company Reported Costs	Staff Estimated Annual Cost
Grand Total - Table 4 and Table 5 Testing Costs				62,642	64,693

The District calculated its total wastewater testing cost for Anthem Wastewater was \$62,642. Staff estimated that total testing costs for Anthem Wastewater was \$64,693. Staff believes that the proposed total testing cost of \$62,642 reported by the District is reasonable; therefore, Staff recommends that an annual testing cost of \$62,642 be used for purposes of this proceeding.

2. Reclassification of Plant

- a. An expense of \$30,900 was listed in the Structure and Improvement for Water Treatment Account No. 354200. Staff understands this expense was actually payment for an on-site generator at Anthem LS No.2. Staff recommends \$30,900 be reclassified to the Waste Water Power Generation Equipment Account No.355500.
- b. An expense of \$4,000 was listed in the Structure and Improvement for Water Treatment Account No. 354200. Staff understands this expense was actually payment for level control equipment for pump on/off control including ultrasonic sensor, electrode, level switch, etc. at Anthem LS No. 2. Staff recommends \$4,000 be reclassified to the Waste Water Electric Pump Equipment Account No.371100.

3. Anthem Wastewater Treatment Plant (“WWTP”) Headwork Modification Project

Staff observed during its field inspection that the Anthem WWTP headwork modification project was completed and in service. Staff concludes that this project was used and useful at the time of Staff’s inspection.

4. Staff Proposed Modifications to the Anthem Wastewater Off-site Hookup Fee (“OFHF”) Tariff

The District has an approved OFHF Tariff that became effective on (blank). This tariff does not include the reporting the Commission now requires of utilities that file for OFHF tariff approval. Therefore, Staff recommends that the current Anthem Wastewater OFHF tariff be replaced with the attached modified OFHF tariff (See Figure 6). Staff further recommends that the District be required to comply with the Status Reporting Requirements contained in Paragraph J immediately.

Figure 1

ANTHEM WASTEWATER DISTRICT CERTIFICATED AREA

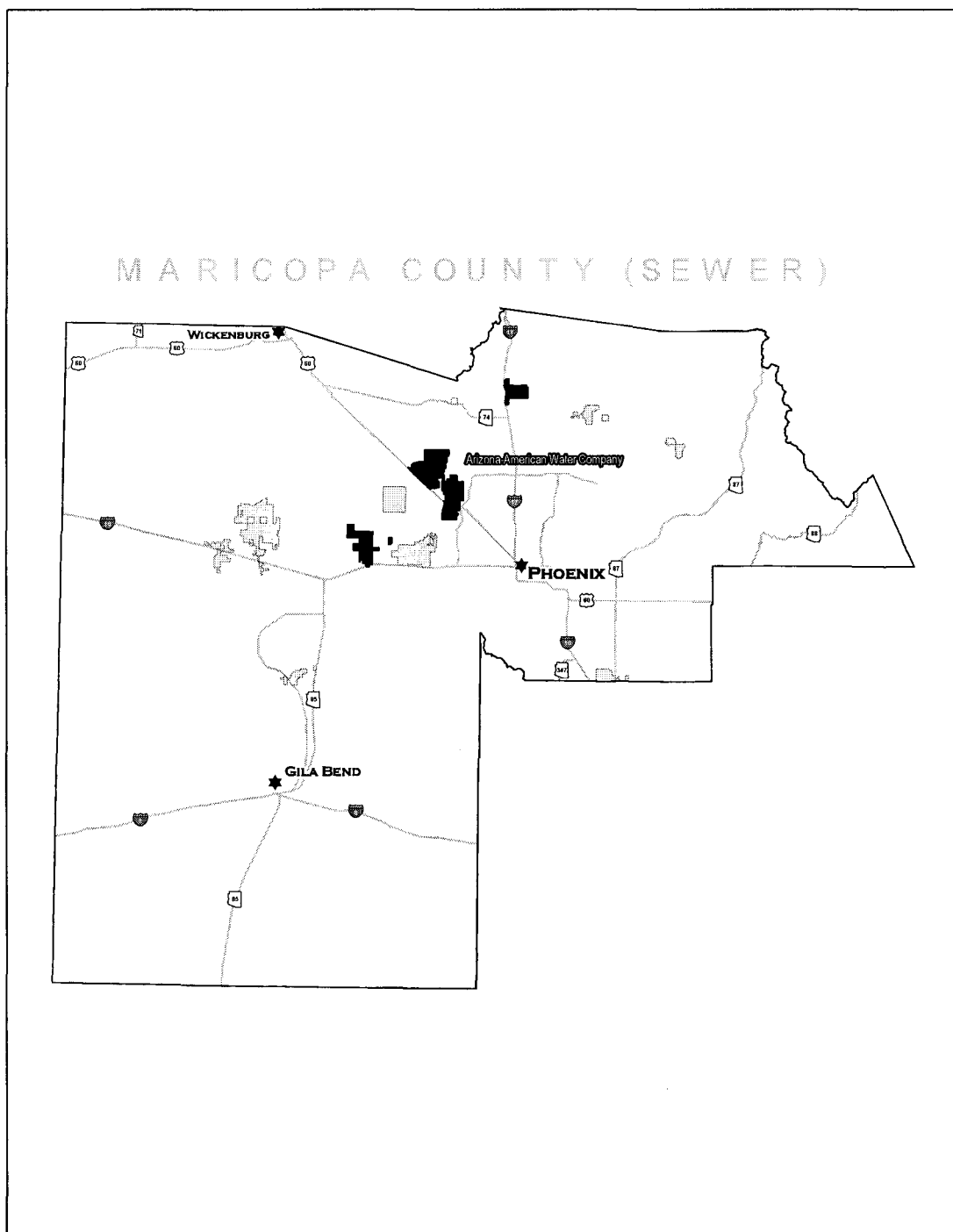
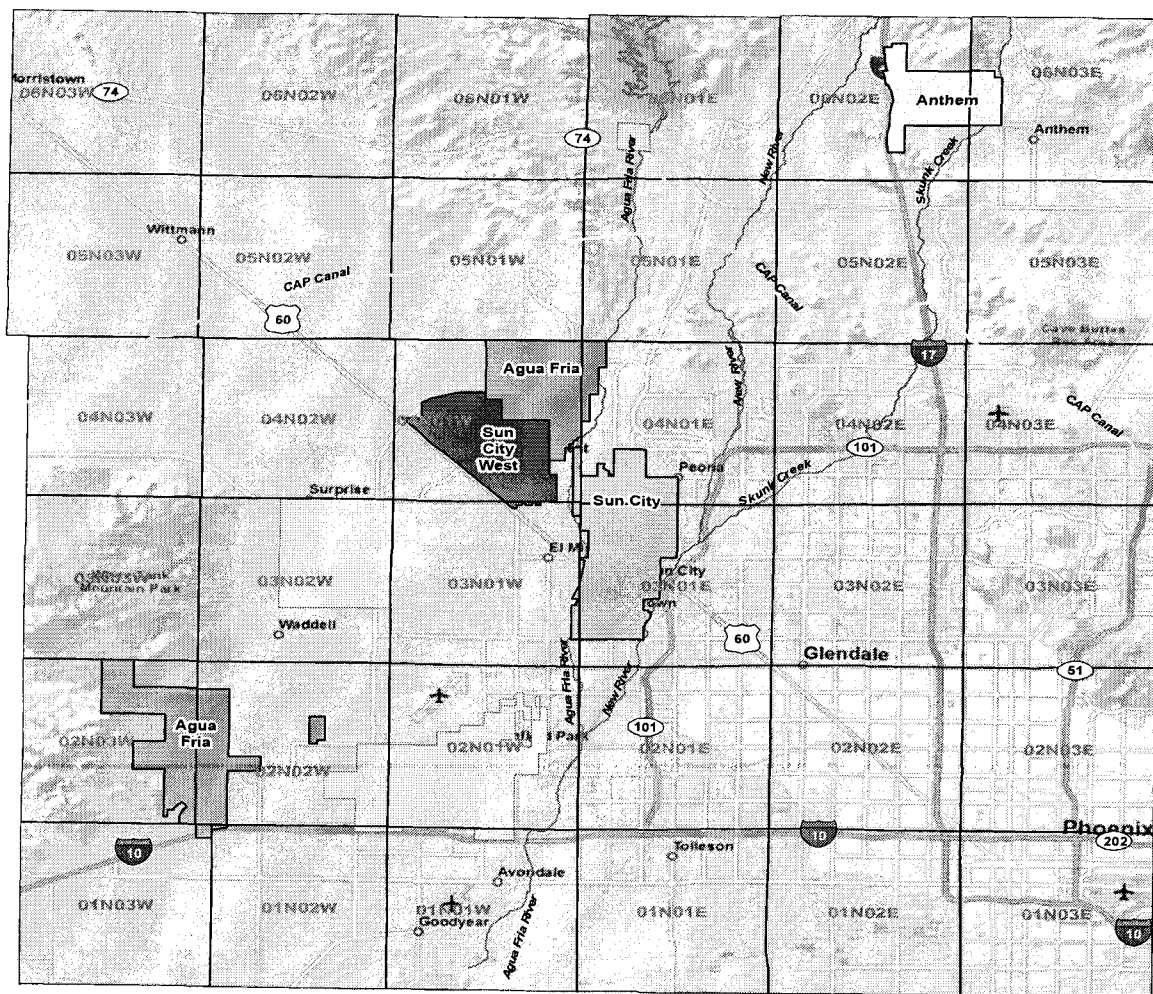


Figure 2

LOCATION OF ANTHEM WASTEWATER DISTRICT



Maricopa County

Arizona American Water Company (Sewer)

FIGURE 3A

ANTHEM WASTEWATER TREATMENT PLANT SYSTEMATIC FLOW DIAGRAM

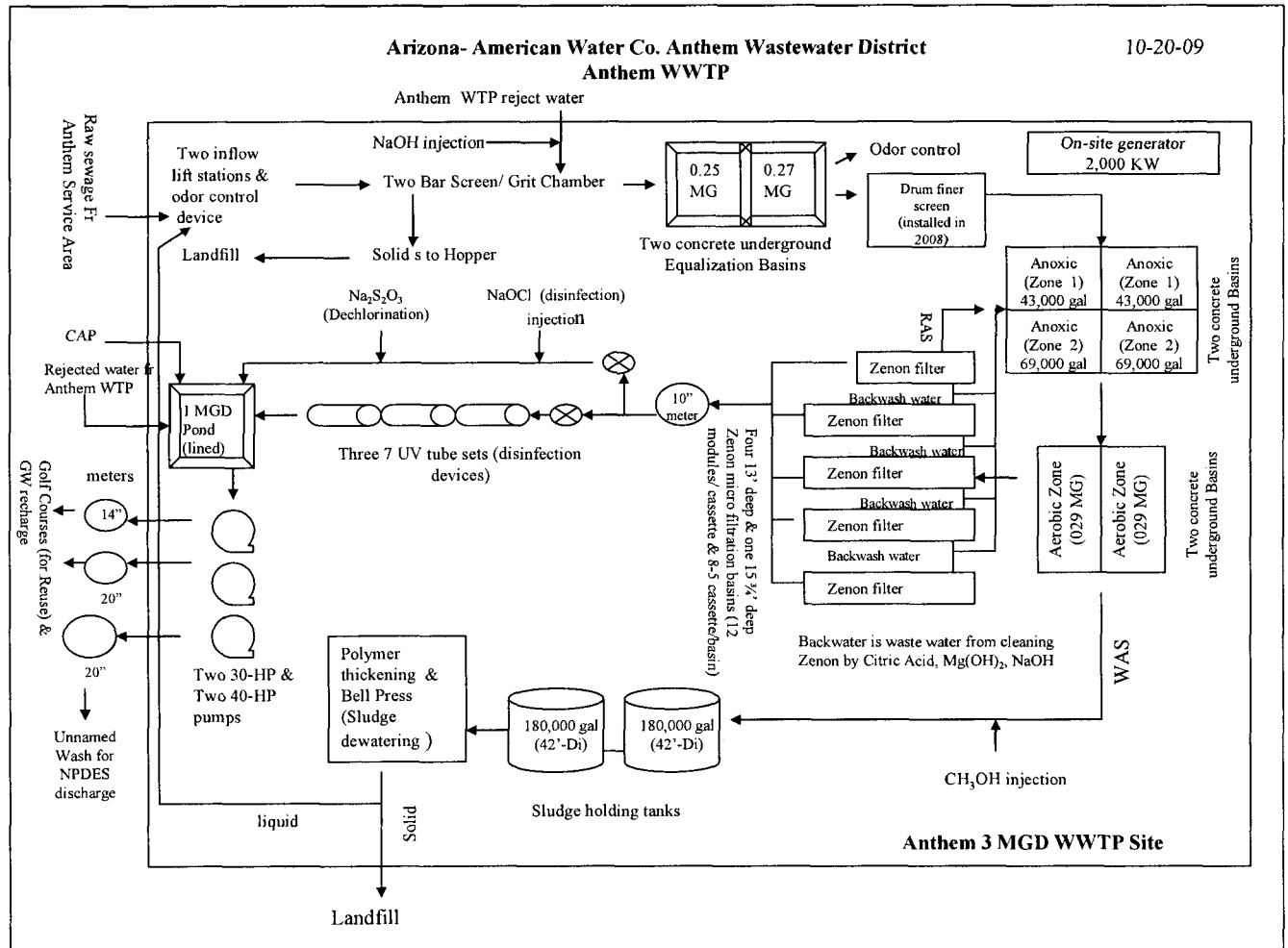


FIGURE 3B

ANTHEM WASTEWATER DISTRICT SYSTEMATIC FLOW DIAGRAM

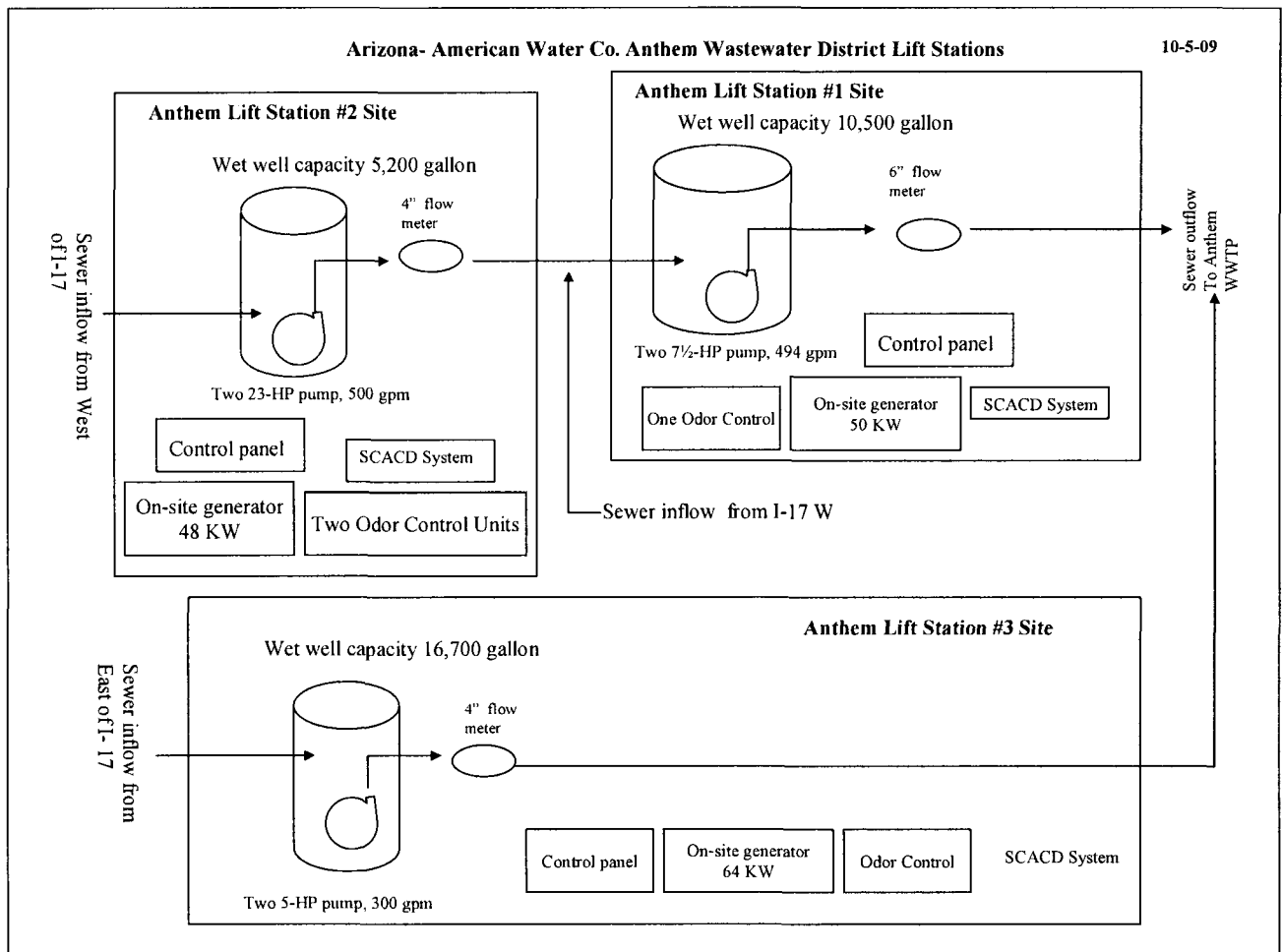


FIGURE 4
WASTEWATER FLOW IN THE DISTRICT

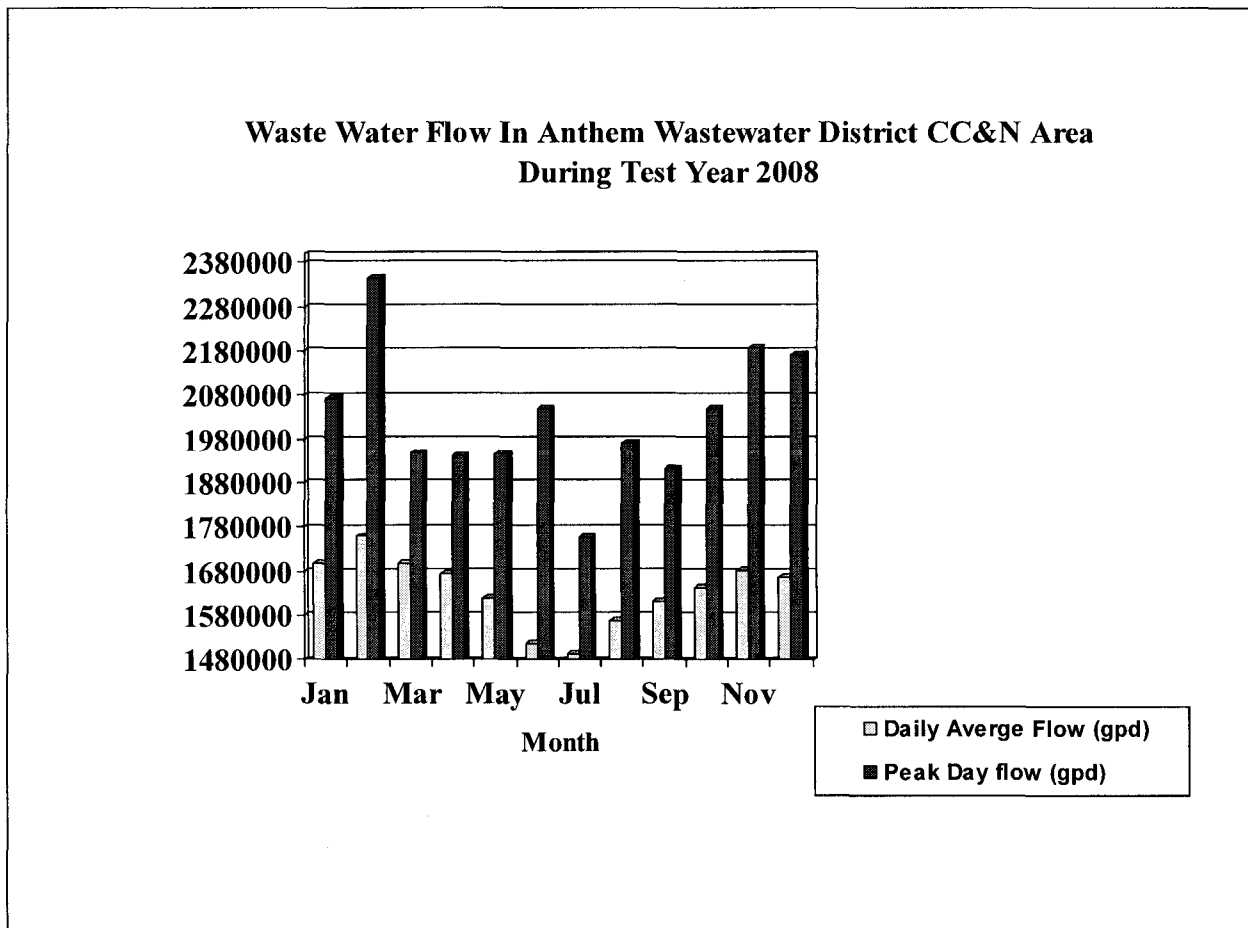


FIGURE 5 Depreciation Rates for Anthem Wastewater District

NARU C Acct #	Co.'s Account	Description	Decision # 70372	Co's proposed rate (%)	Staff Recommended Depreciation Rate (%)
304	304100 ¹	Struct & Imp SS	2.50%	0	0
304	304200 ¹	Struct & Imp P	N/A	0	0
304	304510 ¹	Struct & Imp AG Cap Lease	N/A	0	0
304	304600 ¹	Struct & Imp Offices	N/A	0	0
304	304620 ¹	Struct & Imp Leasehold	N/A	0	0
304	304800 ¹	Struct & Imp Misc	N/A	0	0
307	307000 ¹	Wells & Springs	N/A	0	0
340	340100 ¹	Office Furniture & Equip	N/A	0	0
340	340200 ¹	Comp & Periph Equip	0%	10.00	10.00
340	340300 ¹	Computer Software	N/A	0	0
340	340330 ¹	Comp Software Other	N/A	0	0
340	340500 ¹	Other Office Equipment	N/A	0	0
341	341100 ¹	Trans Equip Lt Duty Trucks	N/A	20.00	20.00
341	341200 ¹	Trans Equip Hvy Duty Trks	25.00%	15.00	15.00
341	341400 ¹	Trans Equip Other ²	25.00%	16.67	16.67
343	343000 ¹	Tools, Shop, Garage Equip	4.47%	4.47	4.47
344	344000 ¹	Lab Equipment	N/A	0	0
346	346100 ¹	Comm Equip Non-Telephone	N/A	0	0
346	346200 ¹	Comm Equip Telephone	N/A	0	0
346	346300 ¹	Comm Equip Other	N/A	0	0
347	347000 ¹	Misc Equipment	N/A	0	0
352	352000	WW Franchises	0.00%	0	0
353	353200	WW Land & Ld Rights Coll	0.00%	0	0
353	353500	WW Land & Ld Rights Gen	0.00%	0	0
354	354200	WW Struct & Imp Coll	2.50%	1.67	1.67
354	354300	WW Struct & Imp SPP	N/A	0	0
354	354400	WW Struct & Imp TDP	0.00%	1.67	1.67
354	354500	WW Struct & Imp Gen	1.67%	1.68	1.67
355	355500	WW power gen equip RWTP	N/A	5.00	4.42
360	360000	WW Collection Sewers Forced	2.04%	2.07	2.07
361	361100	WW Collecting Mains	2.04%	2.04	2.04
362	362000	WW Special Coll Struct	8.40%	2.04	2.04
363	363000	WW Services Sewer	2.04%	2.04	2.04
364	364000	WW Flow Measuring Devices	5.42%	10.00	10.00
370	370000	WW Receiving Wells	5.42%	5.00	3.33
371	371100	WW Pump Equip Elect	5.42%	5.42	5.42
371	371200	WW Pump Equip Oth Power	5.42%	5.42	5.42
380	380000	WW TD Equipment	5.00%	5.00	5.00
380	380050	WW TD Equip Grit Removal	5.00%	5.00	5.00

380	380100	WW Equip Sed Tanks/Acc	5.00%	5.00	5.00
		WW TD Equip Sludge/Effl		5.00	5.00
380	380200	RMV	N/A		
380	380250	WW TD Equip Sludge Dig Tnk	5.00%	5.00	5.00
380	380300	WW TD Equip Sludge Dry/Filt	5.00%	5.00	5.00
380	380400	WW TD Equip Aux Effl Trmt	N/A	5.00	5.00
380	380500	WW TD Equip Chem Trmt Plt	5.00%	5.00	5.00
380	380600	WW TD Equip Oth Disp	5.00%	5.00	5.00
380	380625	WW TD Gen Trmt	N/A	8.40	5.00
		WW TD Equip Influent Lift		8.40	
370	380650	Station	N/A		5.00
381	381000	WW Plant Sewers	N/A	5.00	5.00
382	382000	WW Outfall Sewer Line	N/A	5.00	5.00
389	389100	WW Oth Plt & Misc Equip Int	0.00%	4.98	4.98
390	390000	WW Office Furniture & Equip	4.59%	4.59	4.59
391	391000	WW Trans Equipment	N/A	20.00	20.00
392	392000	WW Stores Equipment	N/A	3.96	3.96
		WW Tool Shop & Garage		4.47	
393	393000	Equip	4.47%		4.47
394	394000	WW Laboratory Equipment	3.71%	3.71	3.71
395	395000	WW Power Operated Equip	5.88%	5.02	5.02
396	396000	WW Communication Equip	10.30%	10.30	10.30
397	397000	WW Misc Equipment	N/A	5.10	5.10
398	398000	WW Other Tangible Plant	0.00%	0.00	0.00

Notes: 1. Per Company's response to Data Request No. STF 14.12 & 14.13, the account reflects allocation of Arizona Corporate plant.
 2. Per Company, the account reflects any transportation equipments that are not light truck or heavy truck; it could be trailer, mules, etc.

FIGURE 6 Off-site Facility Hookup Fee Tariff for Anthem Wastewater District

TARIFF SCHEDULE

UTILITY: Az American Water Co. Anthem Wastewater District DECISION NO. _____
DOCKET NO.: SW-01303A-09-0343 EFFECTIVE DATE: _____

OFF-SITE FACILITIES HOOK-UP FEE (WASTEWATER)

I. Purpose and Applicability

The purpose of the off-site facilities hook-up fees payable to Arizona American Water Company - Anthem Wastewater District (“the Company”) pursuant to this tariff is to equitably apportion the costs of constructing additional off-site facilities to provide wastewater treatment plant facilities among all new service laterals. These charges are applicable to all new service laterals established after the effective date of this tariff. The charges are one-time charges and are payable as a condition to Company’s establishment of service, as more particularly provided below.

II. Definitions

Unless the context otherwise requires, the definitions set forth in R-14-2-601 of the Arizona Corporation Commission’s (“Commission”) rules and regulations governing sewer utilities shall apply interpreting this tariff schedule.

“Applicant” means any party entering into an agreement with Company for the installation of wastewater facilities to serve new service laterals, and may include Developers and/or Builder of new residential subdivisions.

“Company” means Arizona American Water Company - Anthem Wastewater District.

“Collection Main Extension Agreement” means any agreement whereby an Applicant, Developer and/or Builder agrees to advance the costs of the installation of wastewater facilities to the Company to serve new service laterals, or install wastewater facilities to serve new service laterals and transfer ownership of such wastewater facilities to the Company, which agreement does not require the approval of the Commission pursuant to A.A.C. R-14-2-606, and shall have the same meaning as “Wastewater Facilities Agreement”.

“Off-site Facilities” means the wastewater treatment plant, sludge disposal facilities, effluent disposal facilities and related appurtenances necessary for proper operation, including engineering and design costs. Offsite facilities may also include lift stations, transportation mains and related appurtenances necessary for proper operation if these facilities are not for the exclusive use of the applicant and benefit the entire wastewater system.

“Service Lateral” means and includes all service laterals for single-family residential or other uses.

III. Off-Site Facilities Hook-up Fee

For each new service lateral, the Company shall collect an off-site facilities hook-up fee as listed in the following table:

TREATMENT PLANT HOOK-UP FEE TARIFF TABLE		
Service Lateral Size	Factor	Fee
4-inch	1	\$765*
6-inch	2.25	\$1,721
8-inch	4	\$3,060
10-inch	6.25	\$4,781

- Established in Decision No. 70372.

IV. Terms and Conditions

(A) Assessment of One Time Off-Site Facilities Hook-up Fee: The off-site facilities hook-up fee may be assessed only once per parcel, service lateral, or lot within a subdivision (similar to a service lateral installation charge).

(B) Use of Off-Site Facilities Hook-up Fee: Off-site facilities hook-up fees may only be used to pay for capital items of off-site facilities, or for repayment of loans obtained for installation of off-site facilities. Off-site hook-up fees shall not be used for repairs, maintenance, or operational purposes.

(C) Time of Payment:

- (1) In the event that the person or entity that will be constructing improvements (“Applicant”, “Developer” or “Builder”) is otherwise required to enter into a Collection Main Extension Agreement, payment of the fees required hereunder shall be made by the Applicant, Developer or Builder when operational acceptance is issued for the on-site wastewater facilities constructed to serve the improvement.
- (2) In the event that the Applicant, Developer or Builder for service is not required to enter into a Collection Main Extension Agreement, the charges hereunder shall be due and payable at the time wastewater service is requested for the property.

(D) Off-Site Facilities Construction by Developer: Company and Applicant, Developer, or Builder may agree to construction of off-site facilities necessary to serve a particular development by Applicant, Developer or Builder, which facilities are then conveyed to Company. In that event, Company shall credit the total cost of such off-site facilities as an offset to off-site hook-up fees due under this Tariff. If the total cost of the off-site facilities constructed by Applicant, Developer or Builder and conveyed to Company is less than the applicable off-site hook-up fees under this Tariff, Applicant, Developer or Builder shall pay the remaining amount of off-site hook-up fees owed hereunder. If the total cost of the off-site facilities contributed by Applicant, Developer or Builder and conveyed to Company is more than the applicable off-site hook-up fees under this Tariff, Applicant, Developer or Builder shall be refunded the difference upon acceptance of the off-site facilities by the Company.

(E) Failure to Pay Charges; Delinquent Payments: The Company will not be obligated to provide wastewater service to any Developer, Builder or other applicant for service in the event that the Developer, Builder or other applicant for service has not paid in full all charges hereunder. Under no circumstances will the Company connect service or otherwise allow service to be established if the entire amount of any payment has not been paid.

(F) Off-Site Hook-Up Fees Non-refundable: The amounts collected by the Company pursuant to the off-site facilities hook-up fee tariff shall be non-refundable contributions in aid of construction.

(G) Use of Off-Site Hook-Up Fees Received: All funds collected by the Company as off-site facilities hook-up fees shall be deposited into a separate interest bearing trust account and used solely for the purposes of paying for the costs of off-site facilities, including repayment of loans obtained for the installation of off-site facilities.

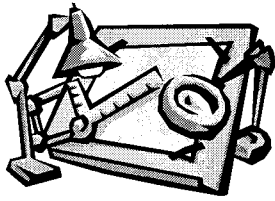
(H) Off-Site Facilities Hook-up Fee in Addition to On-site Facilities: The off-site facilities hook-up fee shall be in addition to any costs associated with the construction of on-site facilities under a Collection Main Extension Agreement.

(I) Disposition of Excess Funds: After all necessary and desirable off-site facilities are constructed utilizing funds collected pursuant to the off-site facilities hook-up fees, or if the off-site facilities hook-up fee has been terminated by order of the Arizona Corporation Commission, any funds remaining in the trust shall be refunded. The manner of the refund shall be determined by the Commission at the time a refund becomes necessary.

(J) Status Reporting Requirements to the Commission: The Company shall submit a calendar year Off-Site Facilities Hook-Up Fee status report each January 31st to Docket Control for the prior twelve (12) month period, beginning January 31, 2012 until the hook-up fee tariff is no longer in effect. This status report shall contain a list of all customers that have paid the hook-up fee tariff, the amount each has paid, the amount of money spent from the account, the

Arizona American Water Company
Anthem – Wastewater District
Docket No. WS-01303A-09-0343
Page 20

amount of interest earned on the tariff account, and a list of all facilities that have been installed with the tariff funds during the 12 month period.



**Engineering Report for Arizona-
American Water Company, Agua
Fria Wastewater District (Rates)
Docket No. WS-01303A-09-0343
By Dorothy Hains, P.E.
March 1, 2010**

EXECUTIVE SUMMARY

CONCLUSIONS

1. Arizona Department of Environmental Quality ("ADEQ") regulates the Arizona American Water Company, Agua Fria Wastewater District ("Agua Fria Wastewater" or "District") under Permit Nos. 27395 and 36947 for the Verrado wastewater treatment plant ("WWTP") and Permit Nos. 26497 and 36953 for the Russell Ranch WWTP. Per the February 5, 2008, Compliance Status Reports issued by ADEQ, both systems are in full compliance for operation and maintenance, operator certification and discharge permit limits. (See § E of the report for discussion and details.)
2. Staff concludes that the Agua Fria WWTPs have adequate capacity to treat the existing customers and reasonable growth in the Agua Fria Wastewater service area. (See § C of the report for discussion and details.)
3. A check of the Arizona Corporation Commission Utilities Division Compliance database showed there is currently no delinquent compliance item for the Agua Fria Wastewater. (See § F of the report for discussion and details.)

RECOMMENDATIONS

1. It is recommended that the Agua Fria Wastewater use depreciation rates as delineated in Figure 6. (See § G and Figure 5 of the report for discussion and details.)
2. Staff recommends an annual testing cost of \$17,954 for the Agua Fria Wastewater. (See § H of the report for discussion and details.)
3. Staff recommends \$1,838,737 be adjusted from Verrado plant expansion expenses, (See § H of the report for discussion and details.)
4. Staff recommends \$487,000 be reclassified from the Structure and Improvement for Water Treatment Account No. 354400 to the Waste Water Power Generation Equipment Account No. 355500. (See § H of the report for discussion and details.)

5. Staff recommends that the current Agua Fria Wastewater OFHF tariff be replaced with the attached modified OFHF tariff (See Figure 7). Staff further recommends that the District be required to comply with the Status Reporting Requirements contained in Paragraph J immediately. (See § H of the report for discussion and details.)

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A. LOCATION OF DISTRICT

Arizona American Water Company, Agua Fria Wastewater District ("Agua Fria Wastewater" or "District") provides service in three different areas, the Verrado development area, the Russell Ranch development area and the Northeast Agua Fria area. Verrado is located near Interstate 10, approximately 2 miles west of the City of Goodyear in Maricopa County. Russell Ranch is located north of City of Goodyear in Maricopa County. Northeast Agua Fria area is located east of Sun City West in Maricopa County. The Company serves approximately 2,100 customers in its CC&N service area. Figure 1 describes the CC&N area of the District, and Figure 2 describes the location of the District.

B. DESCRIPTION OF THE WASTEWATER SYSTEMS SERVING THE AGUA FRIA WASTEWATER SERVICE AREA

The District is served by three separate wastewater treatment plants ("WWTPs"); they are: (1) the Verrado WWTP, (2) the Russell Ranch WWTP and the Northwest Valley Reclaimed Water Reclamation Facility ("Northwest Valley") WWTP. The District owns and operates both Verrado WWTP and Russell Ranch WWTP. Arizona American - Sun City West Wastewater District owns and operates the Northwest Valley WWTP.¹ Both the Verrado WWTP and Russell Ranch WWTP were visited on October 7, 2009, by Dorothy Hains, Utilities Engineer, accompanied by Company representatives, Doug Griffith (Wastewater Operation Manager), Paul Cornejo (Operations Supervisor) and Brad Finke, P. E. (Sr. Project Manager). On October 29, 2007 Staff Engineer, Dorothy Hains inspected the Northwest Valley WWTP accompanied by the Company's representatives, Doug Griffith and Ygnasio Samarripa.

I. Verrado Wastewater System

During the 2008 test year the Verrado system served approximately 2,000 customers in the Verrado development area. The Verrado WWTP has an 830,000 gallon per day ("GPD") treatment capacity. In 2007, the Company began its Phase II expansion of the Verrado WWTP increasing its capacity from 450,000 GPD to its current 830,000 GPD capacity. The District also converted the facility from a sequencing batch reactor ("SBR") process to a conventional activated sludge process. The project was completed in 2008. The Maricopa County Environmental Services Department ("MCESD") issued a Certificate of Approval of Construction for the Verrado WWTP Phase II Expansion on May 30, 2008. The completed plant expansion was in service at the time of Staff's inspection.

¹ The Northwest Valley WWTP is physically located in the Sun City West Wastewater District service area. For Arizona Department of Environmental Quality compliance status and water testing expenses see DMH- 6 Engineering Staff Report for the Sun City West Wastewater District.

The Verrado WWTP is a dual system, it contains raw sewage lift station ("LS"), equalization basin, bar screen, grit removal chamber, biological nutrient removal ("BNR") reactors, clarifier, disk filter, disinfection device and effluent lift station. Final treated effluent is disposed on a golf course for irrigation use and ground water recharge. After dewatering, dry sludge is disposed of at a landfill. Figures 3A and 3B are schematic diagrams of the Verrado wastewater system.

II. Russell Ranch Wastewater System

The Russell Ranch System serves approximately 160 customers in an un-incorporated community in Section 15, Township 2 North and Range 2 West in Maricopa County. Raw sewage gravity flows to the Russell Ranch WWTP for treatment.

Russell Ranch WWTP has a 60,000 GPD treatment capacity. The plant contains raw sewage LS, equalization basin, bar screen, grit removal chamber, BNR reactors, digester, clarifier, disinfection device and dechlorination devices. Final treated effluent is disposed of on-site. Figure 3C is a schematic diagram of the Russell Ranch wastewater system.

III. Northwest Valley wastewater System

The Northwest Valley System serves approximately 2,820 customers in the Corte Bella development ("Corte Bella") which is located in the Northeast Agua Fria area. The wastewater from Corte Bella flows to the Northeast Agua Fria area LS which pumps the wastewater to the 5,000,000 GPD Northwest Valley WWTP for treatment and disposal. For further discussion see the Arizona - American Sun City West Wastewater District report. Figure 3D is a schematic diagram of the Northwest Valley wastewater system.

Table 1 Plant Data

Lift Station ("LS") Facilities

	Connecting to which WWTP	Location	No. Pumps	Pump (in HP)	Capacity (in gallons per minute per pump)	Wet Well Capacity (in gallons)
Verrado High School LS	Verrado WWTP	20050 W Indian School Rd, Litchfield Park	2	15	217	5,828
NEAF LS	NWVRWRF WWTP	21555 N 119 th Ave, Sun City West	2	35	1,760	55,600

Force Mains (in Verrado, Russell Ranch and NEAF)

Size (in inches)	Material	Length (in feet)
8	Ductile Iron Pipe ("DIP")	5,264

Collection Mains (including Verrado, Russell Ranch and NEAF)

Size (in inches)	Material	Length (in feet)
4	N/A	N/A
6	Polyvinyl chloride ("PVC")	246
8	PVC	379,024
10	PVC	11,580
12	PVC	24,327
15	PVC	46,940
18	PVC	25,566
21	PVC	9,868
24	PVC	N/A
30	PVC	N/A
Undetermined	PVC	101,772

Manholes & Cleanouts (including Verrado, Russell Ranch and NEAF)

Type	Quantity
Standard Manhole	2,800
Cleanouts	131

Services (including Verrado, Russell Ranch and NEAF)

Size (in inches)	Material	Length (in feet)
4	N/A	N/A
6	N/A	N/A
8	N/A	N/A
12	N/A	N/A
15	N/A	N/A

C. WASTEWATER FLOW

I. Verrado Wastewater System

Figure 4A is graphic illustration of the wastewater flow data for the Verrado system during the test year. Table 2 shows the wastewater flow data for the Verrado system during the test year. The average daily flows experienced the highest flow of 198,500 gallons per day ("GPD") in November and the peak day flow occurred in July when 372,000 GPD flow was recorded. The average daily flow was 96 GPD per customer.

Table 2 Wastewater Flow Verrado Development Area

Month	Number of Connections	Total Volumes of Treated Wastewater (gallons)	Daily Average Flow (gallons/day)	Peak Day Flow (gallons)	Daily Average Flow (gal/day/customers)
Jan	1,985	5,273,000	170,097	248,000	86
Feb	1,963	5,341,000	190,750	261,000	97
Mar	1,962	5,574,000	179,806	243,000	92
Apr	1,961	5,617,000	187,233	239,000	95
May	1,961	5,704,000	184,000	248,000	94
Jun	1,959	5,166,000	172,200	242,000	88
Jul	1,959	6,006,000	193,742	372,000	99
Aug	1,956	6,088,000	196,387	249,000	100
Sep	1,955	5,748,000	191,600	247,000	98
Oct	1,955	5,841,000	188,419	256,000	96
Nov	1,952	5,955,000	198,500	244,000	102
Dec	1,948	6,065,000	195,645	234,000	100
Average					96

Staff concludes that the Verrado WWTP has adequate capacity to serve existing customers and projected growth in the Verrado development area.

II. Russell Ranch Wastewater System

Figure 4B is graphic illustration of the wastewater flow data for the Russell Ranch system during the test year. Table 3 shows the wastewater flow data for the Russell Ranch development area during the test year. The average daily flows experienced the highest flow of 34,194 GPD in December and the peak day flow occurred in January when 76,000 GPD flow² was recorded. The average daily flow was 173 GPD per customer.

² Although the peak day flow exceeded the treatment capacity, the Company properly operated the on-site equalization tank and no wastewater spill or overflow occurred.

Table 3 Wastewater Flow Russell Ranch Development Area

Month	Number of Connections	Total Volumes of Treated Wastewater (gallons)	Daily Average Flow (gallons/day)	Peak Day Flow (gallons)	Daily Average Flow (gal/day/customers)
Jan	143	990,000	31,935	76,000	223
Feb	145	840,000	30,000	53,000	207
Mar	146	886,000	28,581	36,000	196
Apr	147	755,000	25,167	34,000	171
May	147	759,000	24,484	42,000	167
Jun	149	622,000	20,733	30,000	139
Jul	149	627,000	20,226	28,000	136
Aug	152	643,000	20,742	28,000	136
Sep	152	632,000	21,067	28,000	139
Oct	153	719,000	23,194	30,000	152
Nov	156	905,000	30,167	42,000	193
Dec	160	1,060,000	34,194	46,000	214
Average					173

Staff concludes that the Russell Ranch WWTP has adequate capacity to serve existing customers and projected growth in the Russell Ranch development area.

III. Northwest Valley Wastewater System

Figure 4C is graphic illustration of the wastewater flow data for the Northwest Valley system during the test year. Table 4 shows the wastewater flow data for the Northeast Agua Fria area and the Corte Bella Development during the test year. The average daily flows experienced the highest flow of 336,107 GPD in February and the peak day flow occurred in January when 408,000 GPD flow was recorded. The average daily flow was 115 GPD per customer. Table 4 wastewater flow data from NEAF during the test year

Table 4 Wastewater Flow Northeast Agua Fria Area (including Corte Bella)

Month	Number of Connections	Total Volumes of Treated Wastewater (gallons)	Daily Average Flow (gallons/day)	Peak Day Flow (gallons)	Daily Average Flow (gal/day/customers)
Jan	2,428	10,389,000	335,129	408,000	138
Feb	2,448	9,411,000	336,107	390,000	137
Mar	2,467	10,326,000	333,097	402,000	135
Apr	2,499	9,287,000	309,567	366,000	122
May	2,535	9,139,000	294,806	350,000	114
Jun	2,577	8,292,000	276,400	330,000	105
Jul	2,622	8,002,000	258,129	300,000	97
Aug	2,655	8,343,000	269,129	326,000	100
Sep	2,703	8,053,000	268,433	326,000	98
Oct	2,745	9,574,000	308,839	376,000	111
Nov	2,774	10,074,000	335,800	400,000	119
Dec	2,816	10,238,000	330,258	374,000	121
Average					115

Staff concludes that the Northwest Valley WWTP has adequate capacity to serve existing customers and projected growth in the Northeast Agua Fria area including the Corte Bella Development.

D. GROWTH

Based on the service connection data in the District's annual reports, the Verrado development area had an average annual growth rate of 35 new customers per year from 2005 till 2008. The Russell Ranch development area had an average annual growth rate of 4 new customers per year from 2005 till 2008. The Northeast Agua Fria area including Corte Bella had an average annual growth rate of 449 new customers per year from 2005 till 2008. The following table summarizes actual and projected growth in the Agua Fria service areas.

Table 5 Actual and Projected Growth in Agua Fria Wastewater Service Areas

Year	Nos. of Customers			
	Verrado	Russell Ranch	Corte Bella	
2003	N/A	N/A	N/A	Reported
2004	N/A	N/A	N/A	Reported
2005	1,843	148	1,469	Reported
2006	N/A	N/A	N/A	Reported
2007	1,985	N/A	2,428	Reported
2008	1,948	160	2,816	Reported
2009	1,983	164	3,265	Estimated
2010	2,018	168	3,714	Estimated
2011	2,057	172	4,163	Estimated
2012	2,088	176	4,612	Estimated
2013	2,123	180	5,061	Estimated

E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

ADEQ and Maricopa County Environmental Services Department ("MCESD") regulate the Verrado wastewater system under Wastewater Facility No.27395and 36947and Aquifer Protection Permit ("APP") No. P105202. ADEQ and MCESD regulate the Russell Ranch wastewater system under Wastewater Facility No.26497 and 36953 and APP No. 105229. Per the February 5, 2008, Compliance Status Reports issued by ADEQ, both Verrado system and Russell Ranch system are in full compliance for operation and maintenance, operator certification and discharge permit limits.

F. ARIZONA CORPORATION COMMISSION (“COMMISSION”) COMPLIANCE

A check of the Commission Utilities Division Compliance database showed there is currently no delinquent compliance item for the District.

G. DEPRECIATION RATES

Decision No. 70372 (dated June 13, 2008) approved the depreciation rates used by the District in this rate proceeding except that the District reorganized the authorized rates utilizing the National Association of Regulatory Commissioners’ (“NARUC”) latest plant account matrix as presented in Figure 6. Staff recommends that the depreciation rates presented in Figure 6 by NARUC account.

H. OTHER ISSUES

I. Chemical Testing Expenses

The District re reported an annual water testing expense for the combined Verrado and the Russell Ranch wastewater systems was \$17,954. Staff estimated total annual water testing expense for the District to be \$31,503. Staff concludes that the annual chemical testing cost reported by the District is reasonable and should be adopted. (See Table 6 - Testing Cost for Verrado Wastewater System – APP #P-105202 and Table 7 - Testing Cost for Russell Ranch system – APP #P-105229.)

Table 6 Water Testing Cost for Verrado Wastewater System - APP #P-105202

Monitoring – Discharge	No. of tests per year	Cost per test (District's)	Cost per test (Staff estimated)	District Reported Total Costs	Staff Estimated Annual Cost
Bacteriological – Fecal Coliform (single sample maximum) –daily	365	0	0	0 ¹	0
Bacteriological – Fecal Coliform (7 sample median) – daily	365	\$20 ¹	20	\$7,300 ¹	7,300
Total Nitrogen (Sum of nitrite, nitrate and TKN) - monthly	12	\$126 ¹	65	\$1,512 ¹	780
Total Dissolved Solids –semi-annually	2	N/A	17		34
Anions (include bicarbonate, sulfate, carbonate, chloride) – semi-annually	2	\$102 ¹	95	\$204 ¹	190
Total Metals (Inorganics – Priority Pollutants including fluoride & free cyanide) – quarterly	4	\$245 ¹	252	\$980 ¹	1,008
Total Trihalomethanes – semi-annually-	2		110		220
SOCs – semi-annually	2	\$390 ¹	350	\$780 ¹	700
VOCs – semi-annually	2	\$200 ¹	220	\$400 ¹	440
Total				\$11,176¹	10,672

Note: 1. Based on the District Response to Data Request No. STF 7.6

Monitoring – Ground Water (monitoring well)	No. of tests per year	Cost per test (Company's)	Cost per test (Staff estimated)	Company Reported Total Costs	Staff Estimated Annual Cost
Total Dissolved Solids (TDS) – semi-annually	2	N/A	17		34
Total Nitrogen (Sum of nitrite, nitrate and TKN) - monthly	12	\$65 ¹	65	\$780 ¹	780
Total Kjeldahl Nitrogen - monthly	12	N/A	40	\$0 ¹	480
Fecal coliform - monthly	12	\$11	20	\$132 ¹	240
Total coliform - monthly	12	\$15	25	\$180 ¹	300
Anions (include bicarbonate, sulfate, carbonate, chloride) – semi-annually	2	\$102 ¹	95	\$204 ¹	190
Total Metals (Inorganics – Priority Pollutants including fluoride, free cyanide) - quarterly	4 ¹	\$245 ¹	252	\$980 ¹	1,008
Total Trihalomethanes – semi-annually	2	N/A	110	\$0 ¹	220
SOCs – semi-annually	2	\$390	350	\$780 ¹	700
VOCs – semi-annually	2	\$200	220	\$400 ¹	400
Total				\$3,456¹	3,538

Note: 1. Based on the District Response to Data Request No. STF 7.6

Monitoring – Reclaimaed water)	No. of tests per year	Cost per test (Company's)	Cost per test (Staff estimated)	Company Reported Total Costs	Staff Estimated Annual Cost
Total Nitrogen (five sample rolling geometric mean) – monthly	12	N/A	65	0 ¹	780
Bacteriological – Fecal Coliform (single sample maximum) –daily	365	\$11	20	0 ¹	0
Bacteriological – Fecal Coliform (7 sample median) – daily	365	\$14	20	0 ¹	7,300
Turbidity - daily	365	N/A	15	0 ¹	5,475
Turbidity - continuous	N/A	N/A	0	0 ¹	0
Total				0	13,555

Note: 1. Based on the District Response to Data Request No. STF 7.6

Table 7 Water Testing Cost for Russell Ranch Wastewater System –APP #P-105229)

Monitoring – Discharge	No. of tests per year	Cost per test (Company's)	Cost per test (Staff estimated in \$)	Company Reported Total Costs	Staff Estimated Annual Cost
Bacteriological – Fecal Coliform (single sample maximum) – monthly	12	\$20	20	\$0 ¹	0
Bacteriological – Fecal Coliform (7 samples median) – monthly	12	\$20 ¹	20	\$240 ¹	240
Total Nitrogen (five sample rolling geometric mean) – monthly	12	\$126 ¹	65	\$1,512 ¹	780
Nitrate as N - monthly	12	N/A	40	\$0 ¹	480
Nitrite as N - monthly	12	N/A	15	\$0 ¹	180
Total Kjeldahl Nitrogen (TKN) - monthly	12	N/A	40	\$0 ¹	480
Total Metals (Inorganics – Priority Pollutants including fluoride & free cyanide) - quarterly	4	\$245	252	\$980 ¹	1,008
SOCs - annually	1	\$390	350	\$390 ¹	350
VOCs - annually	1	\$200	220	\$200 ¹	220
Total				3,322 ¹	3,738

				District Reported Costs	Staff Estimated Annual Cost
Grand Total - Table 1 and Table 1A Testing Costs				\$17,954	\$31,503

The District reported a total testing cost for Agua Fria Wastewater of \$17,954. Staff estimated a total testing cost for Agua Fria Wastewater of \$31,503. Staff believes that the proposed testing cost of \$17,954 reported by the District is reasonable; therefore, Staff recommends that an annual testing cost of \$17,954 be used for purposes of this proceeding.

II. Verrado WWTP Expansion Project

In 2005 the District expanded the Verrado WWTP based on the level of growth that was occurring in the Verrado development area at that time. The District decided to size and design the expansion based on treatment capacity criteria of 200 GPD per connection instead of using the historical flow data of 96 GPD per connection for the Verrado WWTP. The decision to use the 200 GPD design criteria resulted in 373,000 GPD of WWTP capacity being installed that

wasn't needed based on Verrado's historical flow data and the level of growth that was occurring in the Verrado development area when planning for the expansion took place.

Based on current growth projections Staff estimates that 212,500 GPD³ of daily average treatment capacity will be needed in 2013 to serve customers in the Verrado development area. Staff recommends certain plant adjustments be made to account for the excess WWTP capacity installed. Specific plant and expense adjustments Staff recommends are presented in the following table.

NARU C Acct #	Description	Per the Company's Acct #	Item Description	Staff recommended adjustment per the District Response to STF 7.1 (\$)
354	Structure & Improvements			
		354400-ww struct & Imp TDP	final effluent pump station ¹	126,022
		354400-ww struct & Imp TDP	Split box	226,915
		354400-ww struct & Imp TDP	clarifier	195,000 ³
371	Pumping Equipment			
		371100-ww pump Equip (elect)	Two 200-HP ² pumps in the final effluent pump station	158,136
380	Treatment and Disposal Equip			
		380000-ww TD Equip	Clarifier tanks	128,700 ³
		380000-ww TD Equip	Clarifier	598,284 ³
		380000-ww TD Equip	disk filter	262,770 ³
		380000-ww TD Equip	chlorine contact chamber	142,900
Total				1,838,737

Notes 1 & 2: Staff believes that the effluent pump station upgrade from two 75-HP pumps to two 200-HP pumps was not necessary. The two 75-HP pumps would have adequate capacity to lift the 0.45 MGD flow to the discharge point.

Note 3: Staff removed one of two clarifiers and one of two disk filters

³ Based on a growth rate of 35 customers per year and a daily average flow of 96 GPD per connection, projected flow is 212,445 GPD by end of 2013.

III. Reclassification

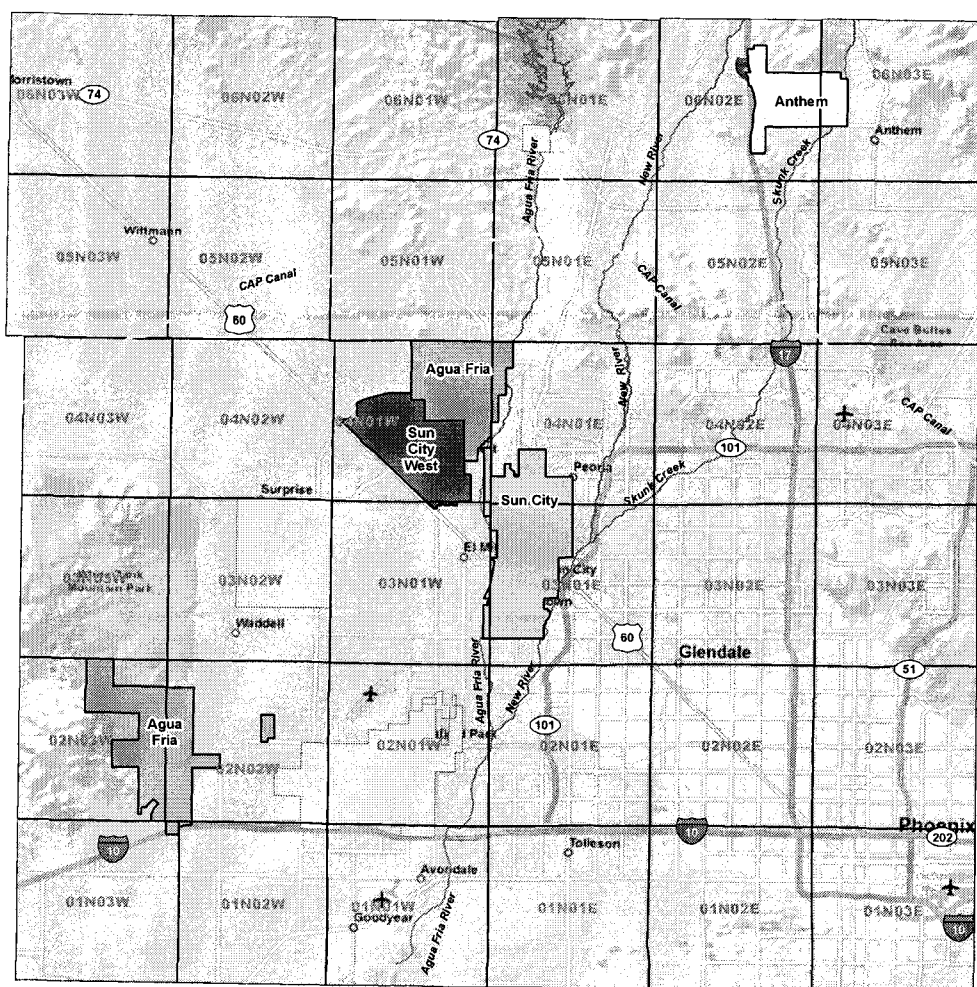
An expense of \$487,000 was listed in the Account No. 354400 (Wastewater Structure and Improvement) for anon-site generator addition to the Verrado WWTP in, Staff recommends that \$487,000 be reclassified to Account No. 355500 (Wastewater Power Generation Equipment).

III. Staff Proposed Modifications to the Agua Fria Wastewater Off-site Hookup Fee ("OFHF") Tariff

The District has an approved OFHF Tariff that became effective on June 13, 2008. This tariff does not include the reporting the Commission now requires of utilities that file for OFHF tariff approval. Therefore, Staff recommends that the current Anthem Wastewater OFHF tariff be replaced with the attached modified OFHF tariff (See Figure 6). Staff further recommends that the District be required to comply with the Status Reporting Requirements contained in Paragraph J immediately.

Figure 1

AGUA FRIA WASTEWATER DISTRICT CERTIFICATED AREA



Maricopa County

Arizona American Water Company (Sewer)

Figure 2

LOCATION OF AGUA FRIA WASTEWATER DISTRICT

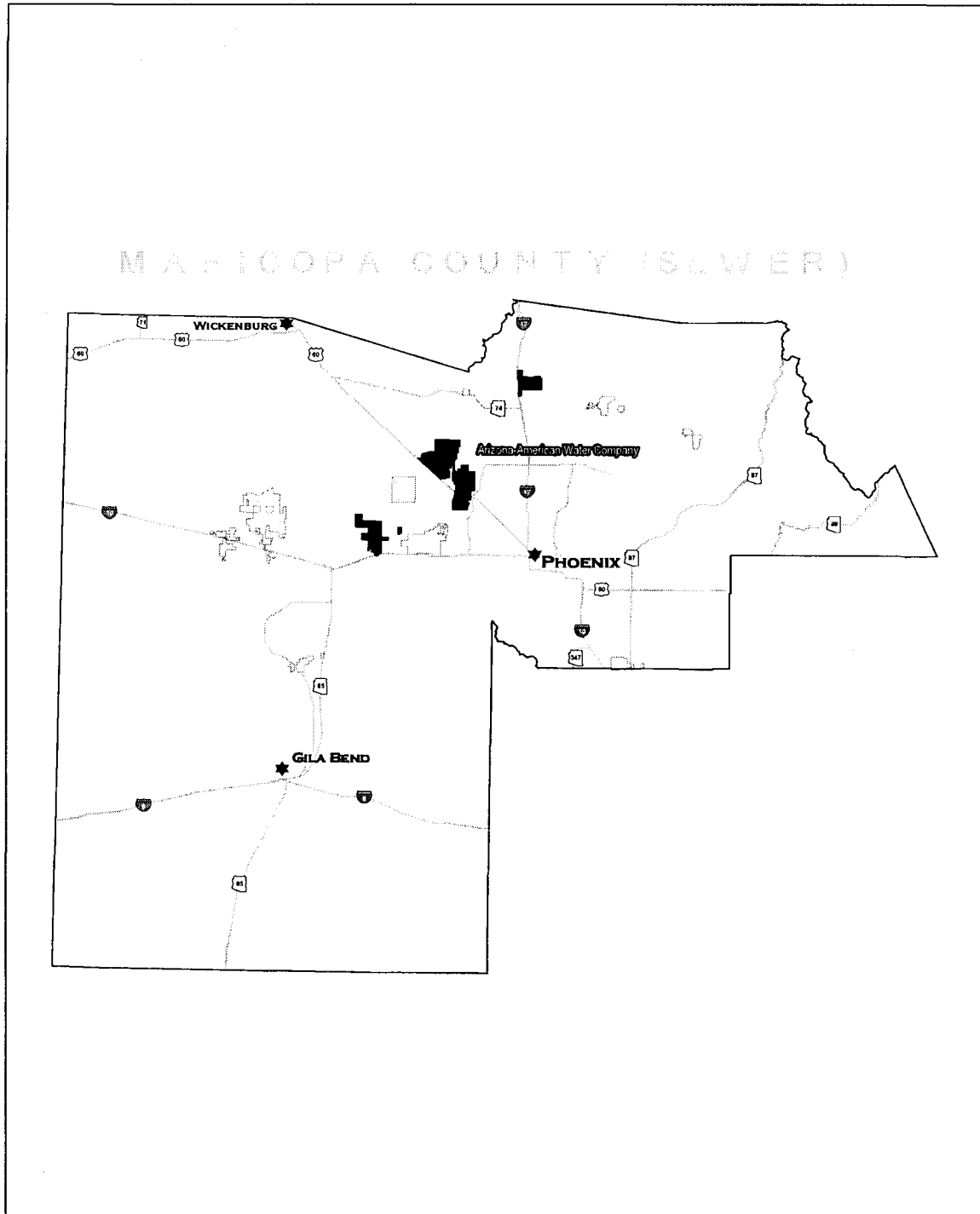


FIGURE 3A
AGUA FRIA WASTEWATER SYSTEMATIC FLOW DIAGRAM

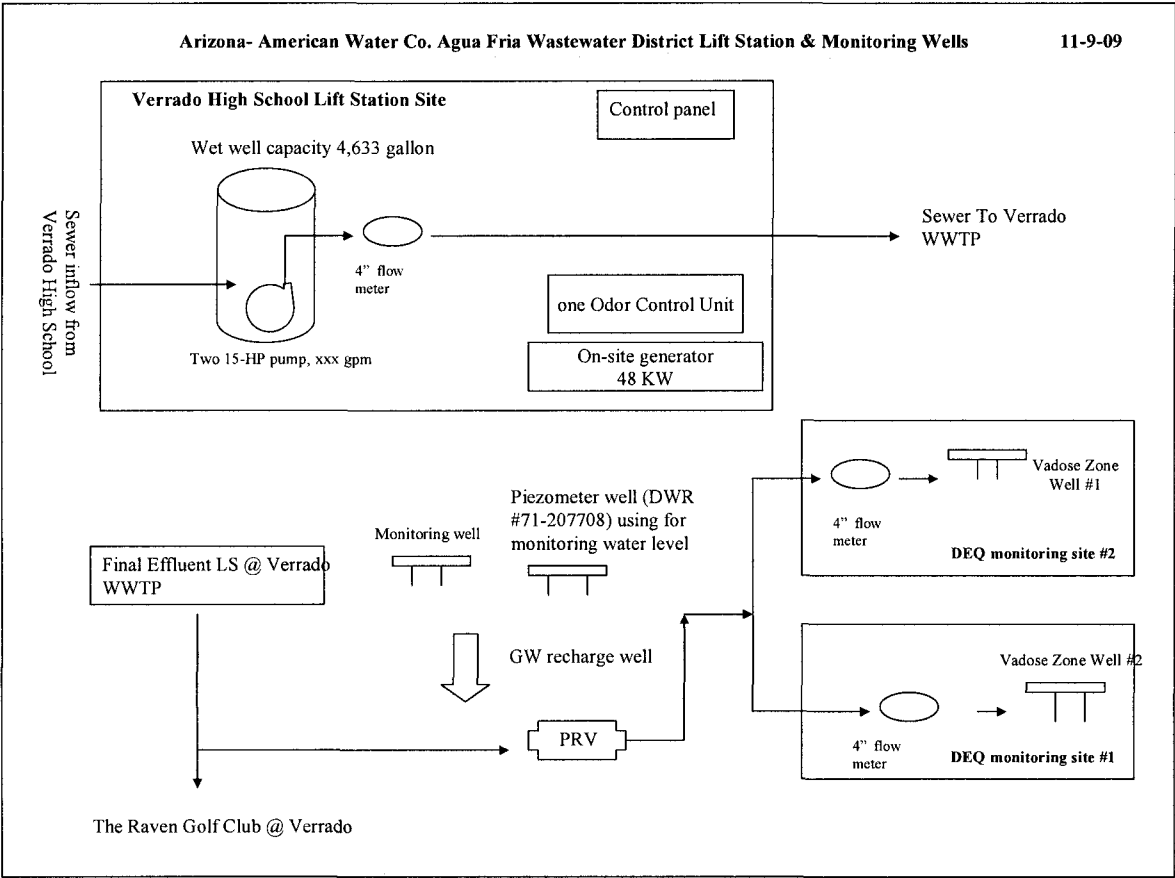


FIGURE 3B

AGUA FRIA WASTEWATER SYSTEMATIC FLOW DIAGRAM

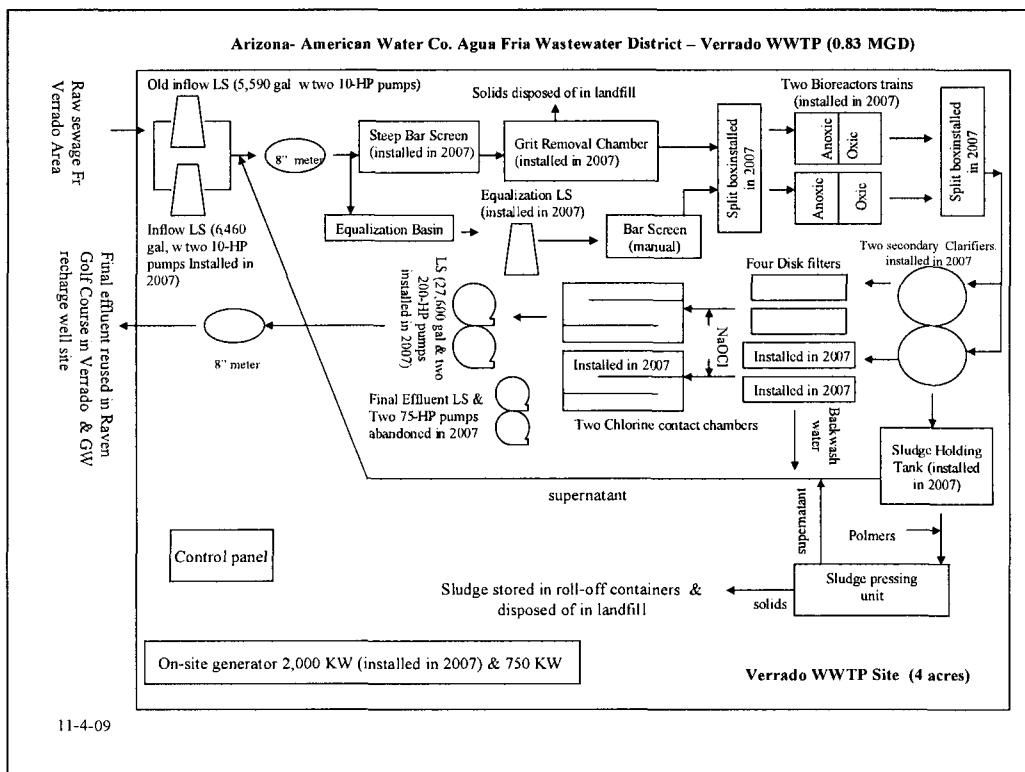


FIGURE 3C

AGUA FRIA WASTEWATER SYSTEMATIC FLOW DIAGRAM

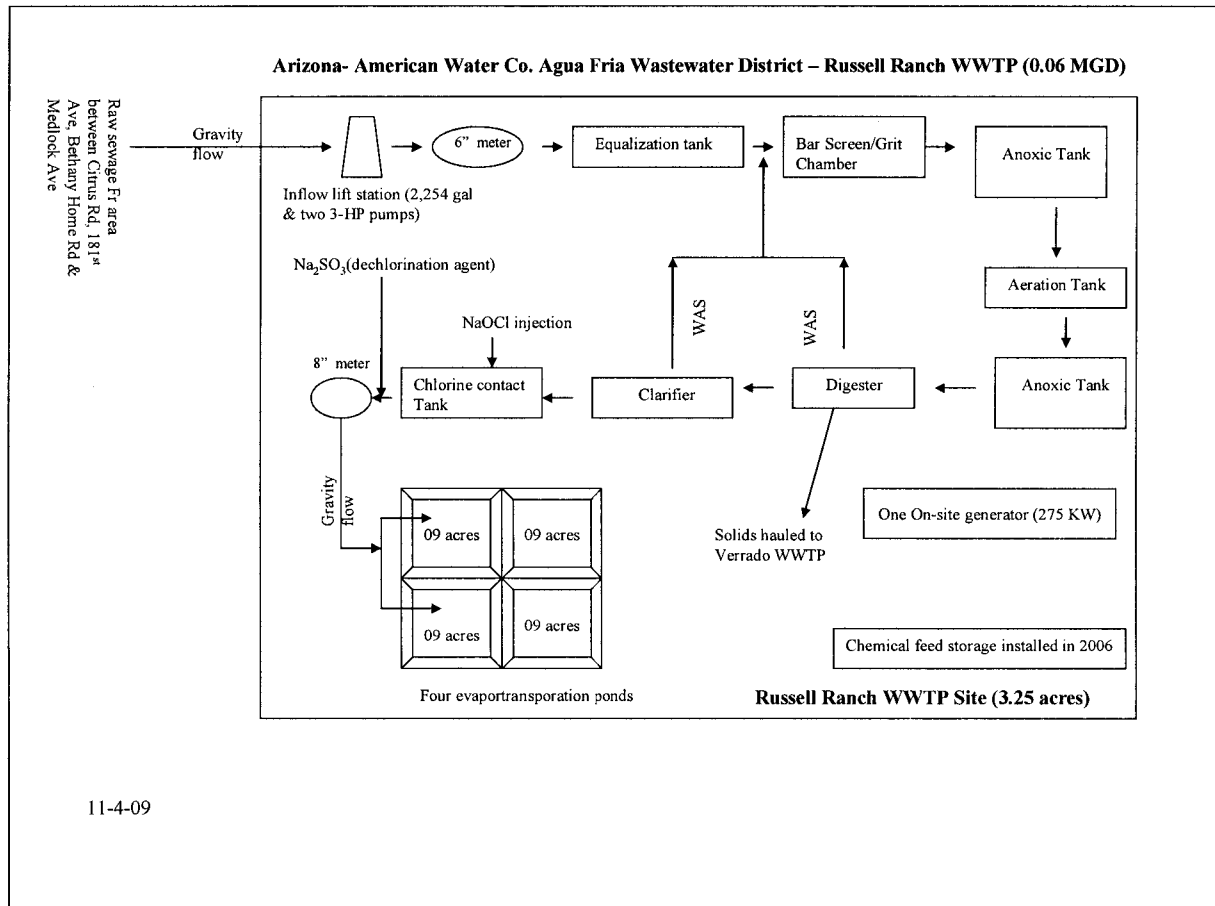


FIGURE 3D

AGUA FRIA WASTEWATER SYSTEMATIC FLOW DIAGRAM

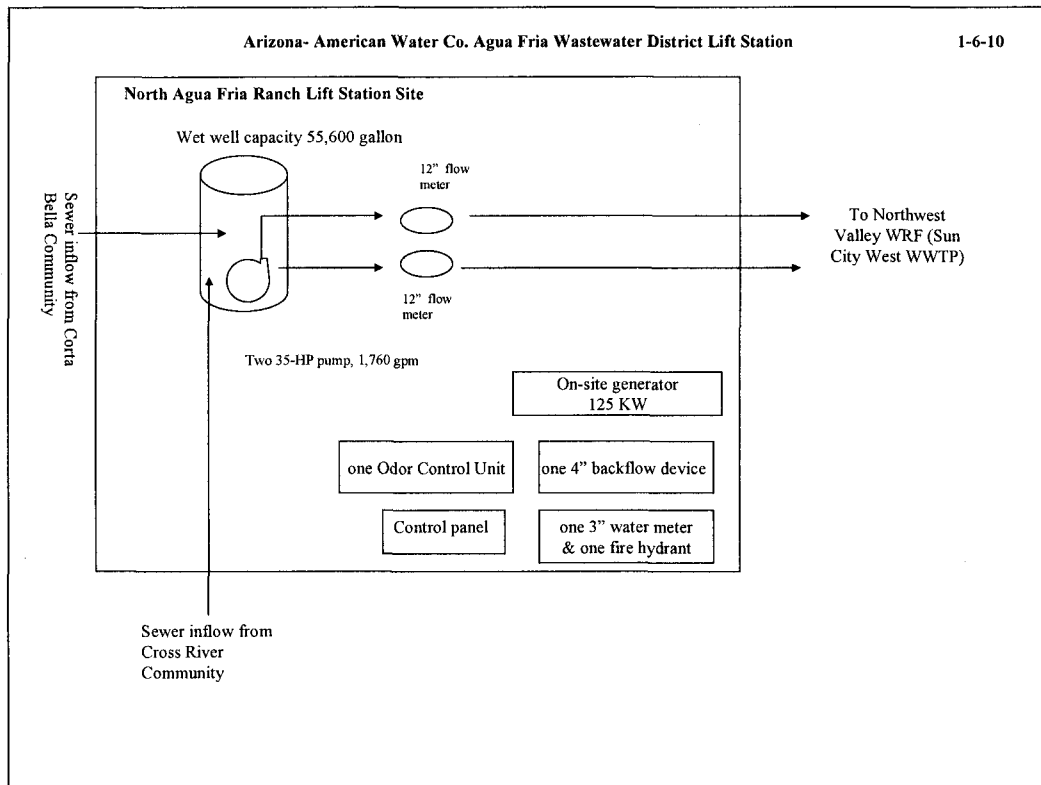


FIGURE 4A
WASTEWATER FLOW FROM VERRADO SERVICE AREA

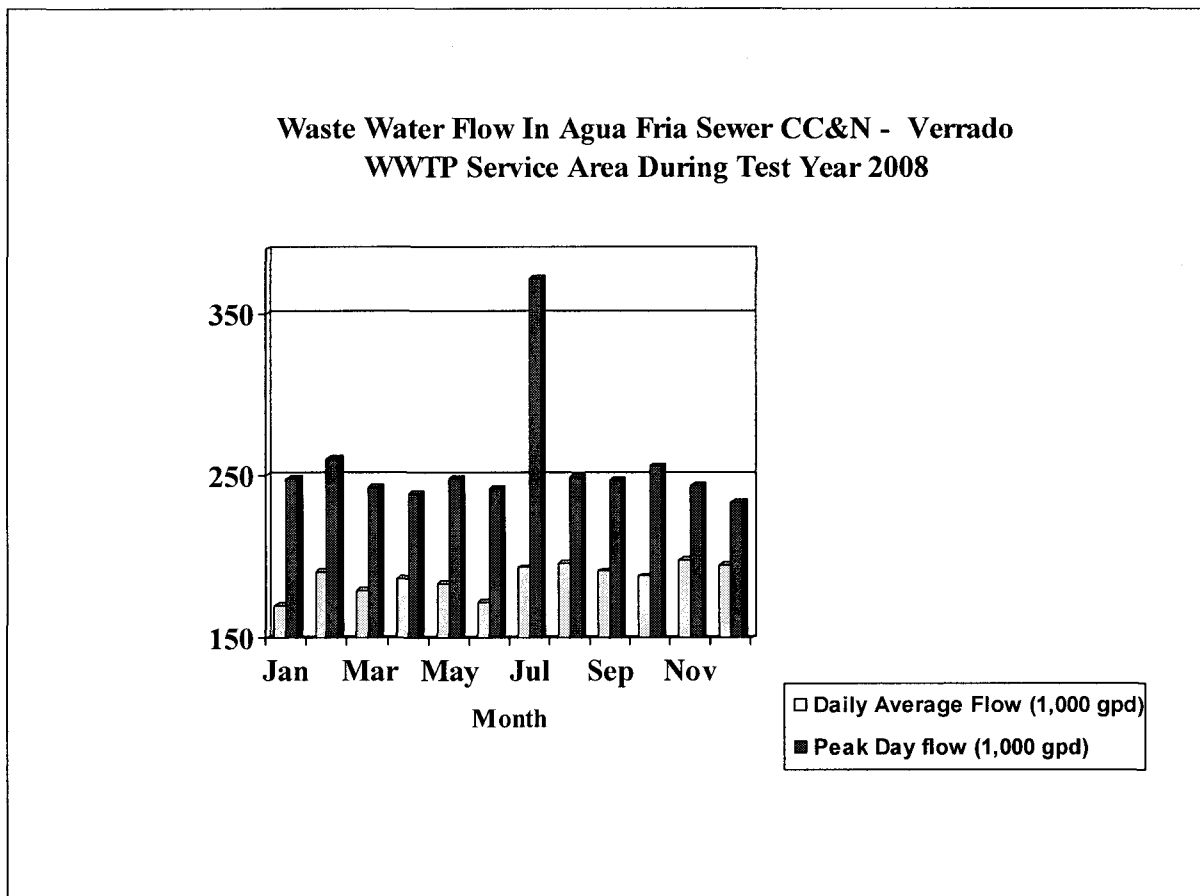


FIGURE 4B

WASTEWATER FLOW FROM RUSSEL RANCH SERVICE AREA

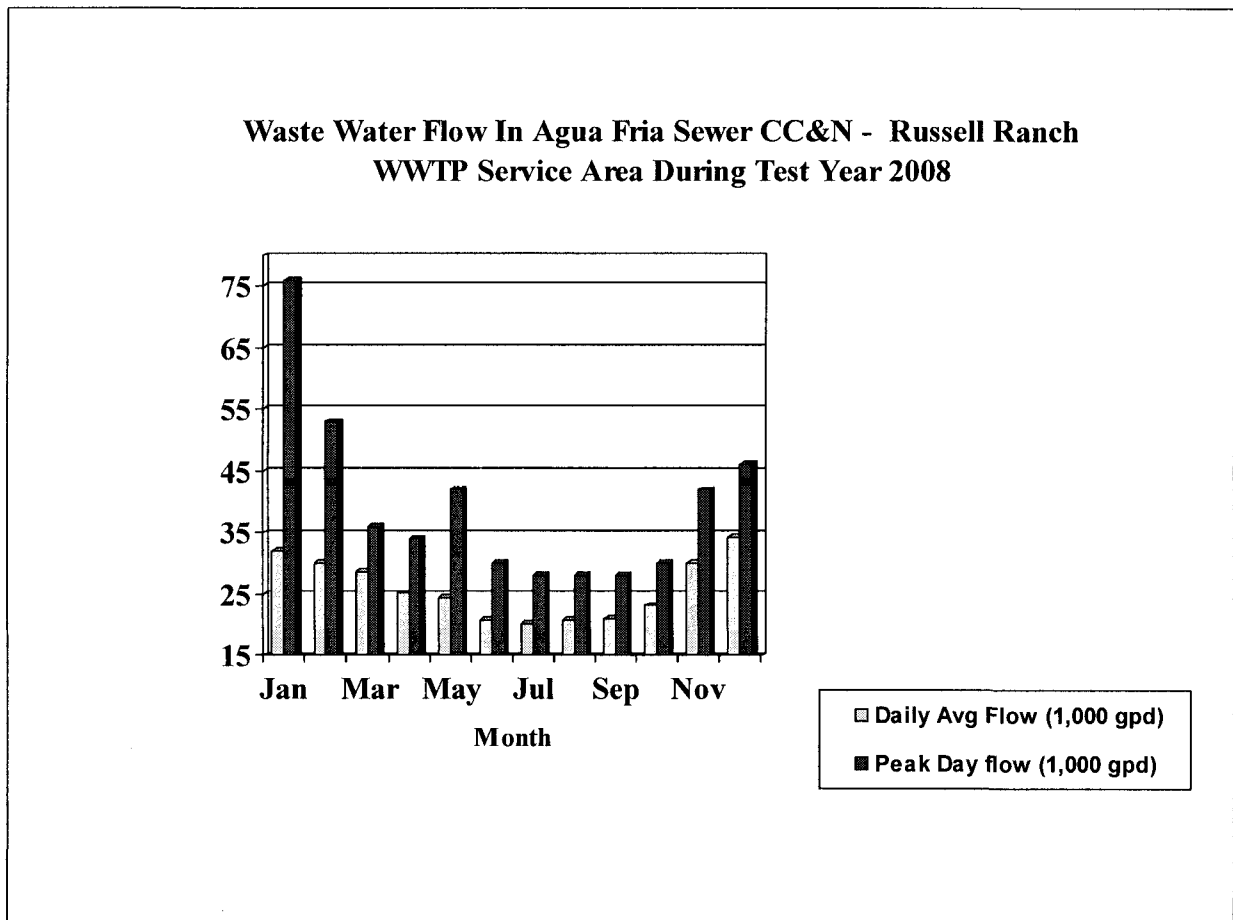


FIGURE 4C

WASTEWATER FLOW FROM NEAF SERVICE AREA

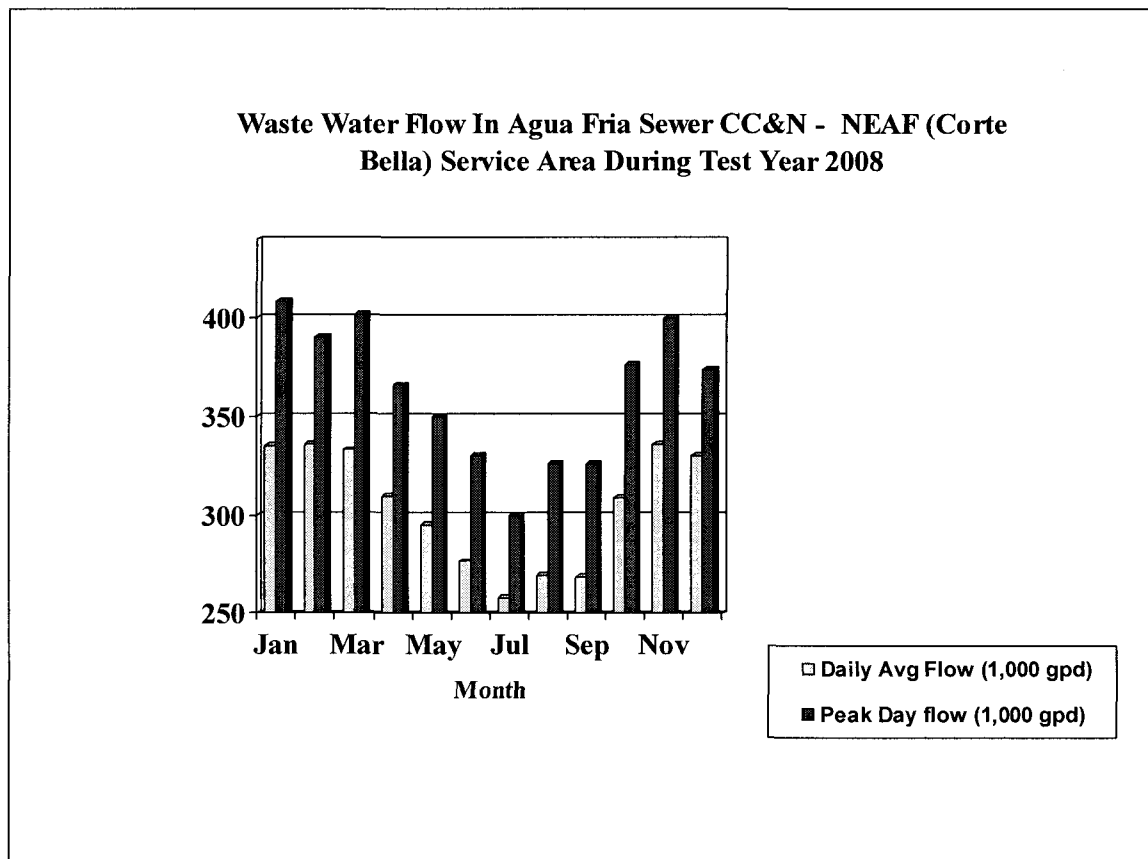


FIGURE 5

PROJECTED AND ACURATE GROWTH IN AGUA FRIA WASTEWATER DISTRICT

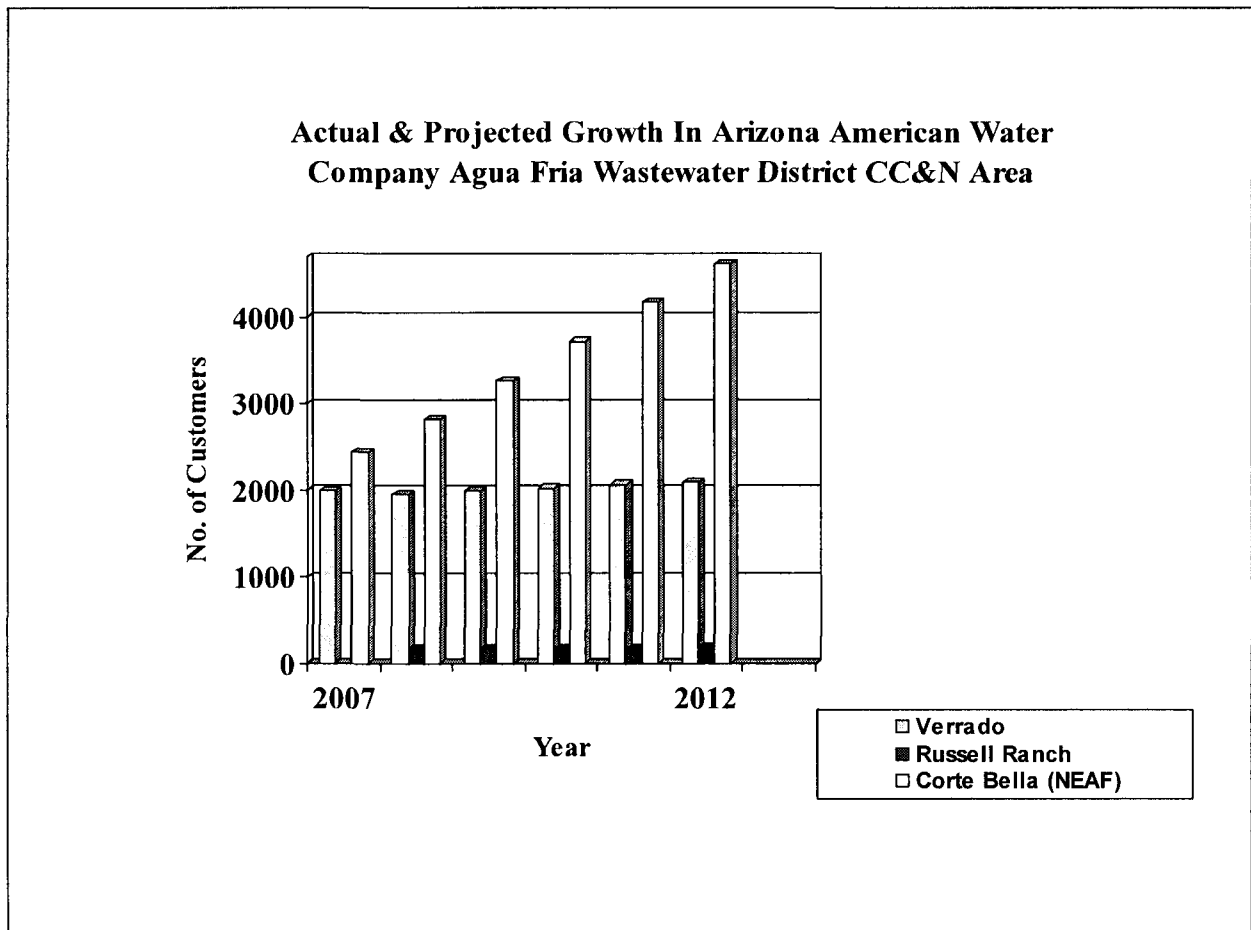


Figure 6 Depreciation Rates for Agua Fria Wastewater District

NARU C Acct #	Co.'s Account	Description	Decision # 70372	Co's proposed rate (%)	Staff Recommended Depreciation Rate (%)
304	304100 ¹	Struct & Imp SS	2.50%	0	0
304	304200 ¹	Struct & Imp P	N/A	0	0
304	304510 ¹	Struct & Imp AG Cap Lease	N/A	0	0
304	304600 ¹	Struct & Imp Offices	N/A	0	0
304	304620 ¹	Struct & Imp Leasehold	N/A	0	0
304	304800 ¹	Struct & Imp Misc	N/A	0	0
307	307000 ¹	Wells & Springs	N/A	0	0
340	340100 ¹	Office Furniture & Equip	N/A	0	0
340	340200 ¹	Comp & Periph Equip	0%	10.00	10.00
340	340300 ¹	Computer Software	N/A	0	0
340	340330 ¹	Comp Software Other	N/A	0	0
340	340500 ¹	Other Office Equipment	N/A	0	0
341	341100 ¹	Trans Equip Lt Duty Trucks	N/A	20.00	20.00
341	341200 ¹	Trans Equip Hvy Duty Trks	25.00%	15.00	15.00
341	341400 ¹	Trans Equip Other ²	25.00%	16.67	16.67
343	343000 ¹	Tools, Shop, Garage Equip	4.47%	4.47	4.47
344	344000 ¹	Lab Equipment	N/A	0	0
346	346100 ¹	Comm Equip Non-Telephone	N/A	0	0
346	346200 ¹	Comm Equip Telephone	N/A	0	0
346	346300 ¹	Comm Equip Other	N/A	0	0
347	347000 ¹	Misc Equipment	N/A	0	0
352	352000	WW Franchises	0.00%	0	0
353	353200	WW Land & Ld Rights Coll	0.00%	0	0
353	353500	WW Land & Ld Rights Gen	0.00%	0	0
354	354200	WW Struct & Imp Coll	2.50%	1.67	1.67
354	354300	WW Struct & Imp SPP	N/A	0	0
354	354400	WW Struct & Imp TDP	0.00%	1.67	1.67
354	354500	WW Struct & Imp Gen	1.67%	1.68	1.67
355	355500	WW power gen equip RWTP	N/A	5.00	4.42
360	360000	WW Collection Sewers Forced	2.04%	2.07	2.07
361	361100	WW Collecting Mains	2.04%	2.04	2.04
362	362000	WW Special Coll Struct	8.40%	2.04	2.04
363	363000	WW Services Sewer	2.04%	2.04	2.04
364	364000	WW Flow Measuring Devices	5.42%	10.00	10.00
370	370000	WW Receiving Wells	5.42%	5.00	3.33
371	371100	WW Pump Equip Elect	5.42%	5.42	5.42
371	371200	WW Pump Equip Oth Power	5.42%	5.42	5.42

380	380000	WW TD Equipment	5.00%	5.00	5.00
380	380050	WW TD Equip Grit Removal	5.00%	5.00	5.00
380	380100	WW Equip Sed Tanks/Acc	5.00%	5.00	5.00
380	380200	WW TD Equip Sludge/Effl RMV	N/A	5.00	5.00
380	380250	WW TD Equip Sludge Dig Tnk	5.00%	5.00	5.00
380	380300	WW TD Equip Sludge Dry/Filt	5.00%	5.00	5.00
380	380400	WW TD Equip Aux Effl Trmt	N/A	5.00	5.00
380	380500	WW TD Equip Chem Trmt Plt	5.00%	5.00	5.00
380	380600	WW TD Equip Oth Disp	5.00%	5.00	5.00
380	380625	WW TD Gen Trmt	N/A	8.40	5.00
370	380650	WW TD Equip Influent Lift Station	N/A	8.40	5.00
381	381000	WW Plant Sewers	N/A	5.00	5.00
382	382000	WW Outfall Sewer Line	N/A	5.00	5.00
389	389100	WW Oth Plt & Misc Equip Int	0.00%	4.98	4.98
390	390000	WW Office Furniture & Equip	4.59%	4.59	4.59
391	391000	WW Trans Equipment	N/A	20.00	20.00
392	392000	WW Stores Equipment	N/A	3.96	3.96
393	393000	WW Tool Shop & Garage Equip	4.47%	4.47	4.47
394	394000	WW Laboratory Equipment	3.71%	3.71	3.71
395	395000	WW Power Operated Equip	5.88%	5.02	5.02
396	396000	WW Communication Equip	10.30%	10.30	10.30
397	397000	WW Misc Equipment	N/A	5.10	5.10
398	398000	WW Other Tangible Plant	0.00%	0.00	0.00

Notes: 1. Per Company's response to Data Request No. STF 14.12 & 14.13, the account reflects allocation of Arizona Corporate plant.
 2. Per Company, the account reflects any transportation equipments that are not light truck or heavy truck, it could be trailer, mules, etc.

FIGURE 7 TARIFF SCHEDULE

UTILITY: Az American Water Co. Agua Fria Wastewater District DECISION NO. _____
DOCKET NO.: SW-01303A-09-0343 EFFECTIVE DATE: _____

OFF-SITE FACILITIES HOOK-UP FEE (WASTEWATER)

I. Purpose and Applicability

The purpose of the off-site facilities hook-up fees payable to Arizona American Water Company – Agua Fria Wastewater District (“the Company”) pursuant to this tariff is to equitably apportion the costs of constructing additional off-site facilities to provide wastewater treatment plant facilities among all new service laterals. These charges are applicable to all new service laterals established after the effective date of this tariff. The charges are one-time charges and are payable as a condition to Company’s establishment of service, as more particularly provided below.

II. Definitions

Unless the context otherwise requires, the definitions set forth in R-14-2-601 of the Arizona Corporation Commission’s (“Commission”) rules and regulations governing sewer utilities shall apply interpreting this tariff schedule.

“Applicant” means any party entering into an agreement with Company for the installation of wastewater facilities to serve new service laterals, and may include Developers and/or Builder of new residential subdivisions.

“Company” means Arizona American Water Company – Agua Fria Wastewater District.

“Collection Main Extension Agreement” means any agreement whereby an Applicant, Developer and/or Builder agrees to advance the costs of the installation of wastewater facilities to the Company to serve new service laterals, or install wastewater facilities to serve new service laterals and transfer ownership of such wastewater facilities to the Company, which agreement does not require the approval of the Commission pursuant to A.A.C. R-14-2-606, and shall have the same meaning as “Wastewater Facilities Agreement”.

“Off-site Facilities” means the wastewater treatment plant, sludge disposal facilities, effluent disposal facilities and related appurtenances necessary for proper operation, including engineering and design costs. Offsite facilities may also include lift stations, transportation mains and related appurtenances necessary for proper operation if these facilities are not for the exclusive use of the applicant and benefit the entire wastewater system.

“Service Lateral” means and includes all service laterals for single-family residential or other uses.

III. Off-Site Facilities Hook-up Fee

For each new service lateral, the Company shall collect an off-site facilities hook-up fee as listed in the following table:

TREATMENT PLANT HOOK-UP FEE TARIFF TABLE		
Service Lateral Size	Factor	Fee
4-inch	1	\$765*
6-inch	2.25	\$1,721
8-inch	4	\$3,060
10-inch	6.25	\$4,781

* Established per Decision No. 70372.

IV. Terms and Conditions

(A) Assessment of One Time Off-Site Facilities Hook-up Fee: The off-site facilities hook-up fee may be assessed only once per parcel, service lateral, or lot within a subdivision (similar to a service lateral installation charge).

(B) Use of Off-Site Facilities Hook-up Fee: Off-site facilities hook-up fees may only be used to pay for capital items of off-site facilities, or for repayment of loans obtained for installation of off-site facilities. Off-site hook-up fees shall not be used for repairs, maintenance, or operational purposes.

(C) Time of Payment:

(1) In the event that the person or entity that will be constructing improvements (“Applicant”, “Developer” or “Builder”) is otherwise required to enter into a Collection Main Extension Agreement, payment of the fees required hereunder shall be made by the Applicant, Developer or Builder when operational acceptance is issued for the on-site wastewater facilities constructed to serve the improvement.

(2) In the event that the Applicant, Developer or Builder for service is not required to enter into a Collection Main Extension Agreement, the charges hereunder shall be due and payable at the time wastewater service is requested for the property.

(D) Off-Site Facilities Construction by Developer: Company and Applicant, Developer, or Builder may agree to construction of off-site facilities necessary to serve a particular development by Applicant, Developer or Builder, which facilities are then conveyed to Company. In that event, Company shall credit the total cost of such off-site facilities as an offset

to off-site hook-up fees due under this Tariff. If the total cost of the off-site facilities constructed by Applicant, Developer or Builder and conveyed to Company is less than the applicable off-site hook-up fees under this Tariff, Applicant, Developer or Builder shall pay the remaining amount of off-site hook-up fees owed hereunder. If the total cost of the off-site facilities contributed by Applicant, Developer or Builder and conveyed to Company is more than the applicable off-site hook-up fees under this Tariff, Applicant, Developer or Builder shall be refunded the difference upon acceptance of the off-site facilities by the Company.

(E) Failure to Pay Charges; Delinquent Payments: The Company will not be obligated to provide wastewater service to any Developer, Builder or other applicant for service in the event that the Developer, Builder or other applicant for service has not paid in full all charges hereunder. Under no circumstances will the Company connect service or otherwise allow service to be established if the entire amount of any payment has not been paid.

(F) Off-Site Hook-Up Fees Non-refundable: The amounts collected by the Company pursuant to the off-site facilities hook-up fee tariff shall be non-refundable contributions in aid of construction.

(G) Use of Off-Site Hook-Up Fees Received: All funds collected by the Company as off-site facilities hook-up fees shall be deposited into a separate interest bearing trust account and used solely for the purposes of paying for the costs of off-site facilities, including repayment of loans obtained for the installation of off-site facilities.

(H) Off-Site Facilities Hook-up Fee in Addition to On-site Facilities: The off-site facilities hook-up fee shall be in addition to any costs associated with the construction of on-site facilities under a Collection Main Extension Agreement.

(I) Disposition of Excess Funds: After all necessary and desirable off-site facilities are constructed utilizing funds collected pursuant to the off-site facilities hook-up fees, or if the off-site facilities hook-up fee has been terminated by order of the Arizona Corporation Commission, any funds remaining in the trust shall be refunded. The manner of the refund shall be determined by the Commission at the time a refund becomes necessary.

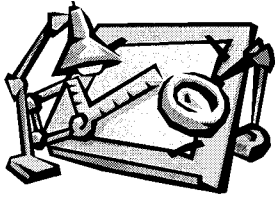
(J) Status Reporting Requirements to the Commission: The Company shall submit a calendar year Off-Site Facilities Hook-Up Fee status report each January 31st to Docket Control for the prior twelve (12) month period, beginning January 31, 2012, until the hook-up fee tariff is no longer in effect. This status report shall contain a list of all customers that have paid the hook-up fee tariff, the amount each has paid, the amount of money spent from the account, the amount of interest earned on the tariff account, and a list of all facilities that have been installed with the tariff funds during the 12 month period.

EXHIBIT DMH-5

**ENGINEERING REPORT FOR
ARIZONA-AMERICAN WATER COMPANY,
SUN CITY WASTEWATER DISTRICT**

BY DOROTHY HAINS, P.E.

March 1, 2010



**Engineering Report for Arizona-
American Water Company, Sun City
Wastewater District (Rates)
Docket No. Ws-01303a-09-0343
By Dorothy Hains, P. E.
February 22, 2010**

EXECUTIVE SUMMARY

RECOMMENDATIONS:

1. Staff recommends that the depreciation rates by National Association of Regulatory Commissioners' account presented in Figure 6 be used for purposes of this proceeding. (See §G of report for discussion and details.).
2. Staff recommends that \$12,242 in expense be reclassified to Sun City West Wastewater District's Account for Waste Water Force Mains (account #360000). (See §H of report for discussion and details.)

CONCLUSIONS:

1. Staff concludes that the Arizona-American Water Company Sun City Wastewater District ("Sun City Wastewater" or "District") has adequate treatment capacity to serve its existing customer base and reasonable growth. (See §H of report for discussion and details).
2. A check of the Commission Utilities Division Compliance database showed there is currently no delinquent compliance item for the District. (See §D of report for discussion and details).

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A. LOCATION OF DISTRICT

Arizona-American Water Company Sun City Wastewater District ("Sun City Wastewater" or "District") serves approximately 22,000 customers in the Town of Sun City which is located northwest of the City of Phoenix in Maricopa County. Figure 1 describes the location of the District within Maricopa County, and Figure 2 describes the CC&N area of the District.

B. DESCRIPTION OF THE WASTEWATER SYSTEM

The plant facilities were visited on December 3, 2009, by Staff Engineer, Dorothy Hains, in the accompaniment of Doug Griffith, Wastewater Operation Manager and Ygnasio Samarripa, Northwest Valley Reclaimed Water Recreation Facility ("Northwest Valley") Operation Supervisor.

This system consists only of a collection system that includes lift stations, force mains and collection lines.

Figures 3A, 3B and 3C provide a process schematic for the system. The following tables describe the system in more detail.

Table 1. Sun City Wastewater Facilities

Lift Station

Location	No. Pumps	Pump (HP)	Capacity (gallons per minute per pump)	Wet Well Capacity (gallons)
111 th Ave. Lift Station (@200 N Olive Ave, near 111 th Ave & Olive Ave.)	2	3	160	1,000
Paradise Resort Lift Station (@10950 W Union Hills)	2	7½	700	7,900
Youngtown Lift Station (@11602 W Peoria Ave., near 111 th Ave. & Peoria Ave.)	2	70	1,200	7,516
Baptist Village Lift Station (@11527 W Peoria Ave.)	2	7½	100	1,700
Coyote Lakes Lift Station (@17280 N 115 th Ave.)	2	40	500	7,180
Paradise Resort Lift Station (@10950 W Union Hills Rd)	2	7½	700	7,900
Citrus Point Lift Station (@ 16401 N 115 th Ave.)	2	20	500	4,227
Aqua Fria Ranch Lift Station (@ 9901 N Aqua Fria PKWY)	2	30	650	6,033

Other Facilities

Location	No. Pumps	Flow metering device
99 th Ave. Metering Station (@9802 W Olive Ave.)	0	yes

Force Mains

Size (in inches)	Material	Length (feet)
4	Various	2,982
6	Various	2,037
8	Various	12,313
10	Various	10,387
12	Various	10,410

Collection Mains

Size (in inches)	Material	Length (feet)
4	Various	121
6	Various	9,795
8	Various	1,243,574
10	Various	68,441
12	Various	31,493
15	Various	16,281
18	Various	10,441
21	Various	8,053
24	Various	0
27	Various	1,310
30	Various	2,926
33	Various	1,155
36	Various	867
Undetermined	Various	50,733

Manholes & Cleanouts

Type	Quantity
Standard Manhole	4,573
Cleanouts	766

Services

Size (in inches)	Material	Length (feet)
4	N/A	N/A
6	N/A	N/A
8	N/A	N/A
12	N/A	N/A
15	N/A	N/A

COMPLIANCE

The typical compliance status for Sun City Wastewater is not applicable since the system serving Sun City Wastewater does not include a wastewater treatment plant.

The wastewater collected in the Sun City Wastewater service area is transported to a City of Tolleson Wastewater Treatment Plant ("Tolleson WWTP") for treatment and disposal.¹

D. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check of the Commission Utilities Division Compliance database showed there is currently no delinquent compliance items for the District.

E. WASTEWATER FLOW RATE

Table 2 below summarizes the wastewater flow data in the District during 2008 test year and Figure 4 is a graphic illustration of the same flow data. During this period, the District experienced a daily average wastewater flow of 160 gallons per day ("gpd") per connection, a high wastewater flow of 196 gpd per connection in February, and a low wastewater flow of 142 gpd per connection in June. The peak month is January; a total of 127,031,000 gallons of wastewater was collected from 22,034 connections in January. The low flow month is June; a total of 93,760,000 gallons of wastewater was collected from 22,048 customers in this month.

Table 2 Wastewater Flow (in Sun City Wastewater District)

Month	Number of Connections	Total Volumes of Treated Wastewater (gallons)	Daily Average Flow (gallons/day)	Peak Day Flow (gallons)	Daily Average Flow (gal/day/customers)
Jan	22,034	127,031,000	4,097,774	5,078,000	186
Feb	22,008	120,951,000	4,319,679	5,096,000	196
Mar	22,019	126,759,000	4,089,000	5,048,000	186
Apr	22,013	111,206,000	3,706,867	5,050,000	168
May	22,050	103,649,000	3,343,516	4,038,000	152
Jun	22,048	93,760,000	3,125,333	4,026,000	142
Jul	22,026	97,642,000	3,149,742	4,053,000	143
Aug	22,012	98,232,000	3,168,774	4,053,000	144
Sep	21,998	94,557,000	3,151,900	4,055,000	143
Oct	21,993	104,895,000	3,383,710	4,402,000	154
Nov	21,978	108,923,000	3,630,767	4,219,000	165
Dec	21,965	111,450,000	3,595,161	4,060,000	164
Average			3,514,950		160

F. GROWTH

¹ On July 22, 2009 ADEQ issued a Compliance Status Report for the Tolleson WWTP. In this report ADEQ stated that the Tolleson WWTP is not in full compliance with ADEQ regulations and the Clean Water Act.

Figure 5 shows customer growth based on the service connection data contained in the Company's annual reports, the number of customers increased from 21,468 at the end of 2004 to 21,965 by the end of 2008, with an average growth rate of 111 customers per year from 2004 to 2008. Based on the linear regression analysis, the Company could have approximately 22,690 customers by the end of 2014. The following table summarizes actual and projected growth in the Company's existing certificated service area.

Table 2 Actual and Projected Growth (Sun City Wastewater)

Year	Nos. of Customers	
2002	21,150	Reported
2003	21,151	Reported
2004	21,468	Reported
2005	21,915	Reported
2006	21,604	Reported
2007	22,036	Reported
2008	21,965	Reported
2009	22,132	Estimated
2010	22,244	Estimated
2011	22,355	Estimated
2012	22,467	Estimated
2013	22,578	Estimated
2014	22,690	Estimated

G. DEPRECIATION RATES

Decision No. 70209 (dated March 20, 2008) approved the depreciation rates used by the District in this rate proceeding except that the Company reorganized the authorized rates utilizing the National Association of Regulatory Commissioners' ("NARUC") latest plant account matrix as presented in Figure 6. Staff recommends that the depreciation rates presented in Figure 6 by NARUC account be used by the District. Staff recommends that the depreciation rates by NARUC account presented in Figure 6 be used for purposes of this proceeding.

H. OTHERS

1. Chemical Testing Expenses

The District does not own or operate a wastewater treatment plant. Therefore, Sun City Wastewater does not have to monitor any specified water qualities.² The District did not seek recovery of any chemical testing expenses in this rate proceeding.

2. Removal of Study Expenses

The District in its response to Staff Data Request No. STF 10.2 listed an expense of \$12,242 for a

² At the request of the Tolleson WWTP Sun City Wastewater does occasionally test the quality of its wastewater. Staff believes the expense incurred by the District to do this testing during the test year was minimal.

“Sun City West Sewer Force Main Study”³ in Account Wastewater - Other Plant & Misc Equipment (account # 389600). This study was actually prepared for the Sun City West Wastewater District and including the Northeast Agua Fria area. Staff recommends that this expense be moved to the Sun City West Wastewater District. Since the study was for a proposed force main replacement project Staff further recommends that this expense be reclassified to the Account for Waste Water Force Mains (account #360000).

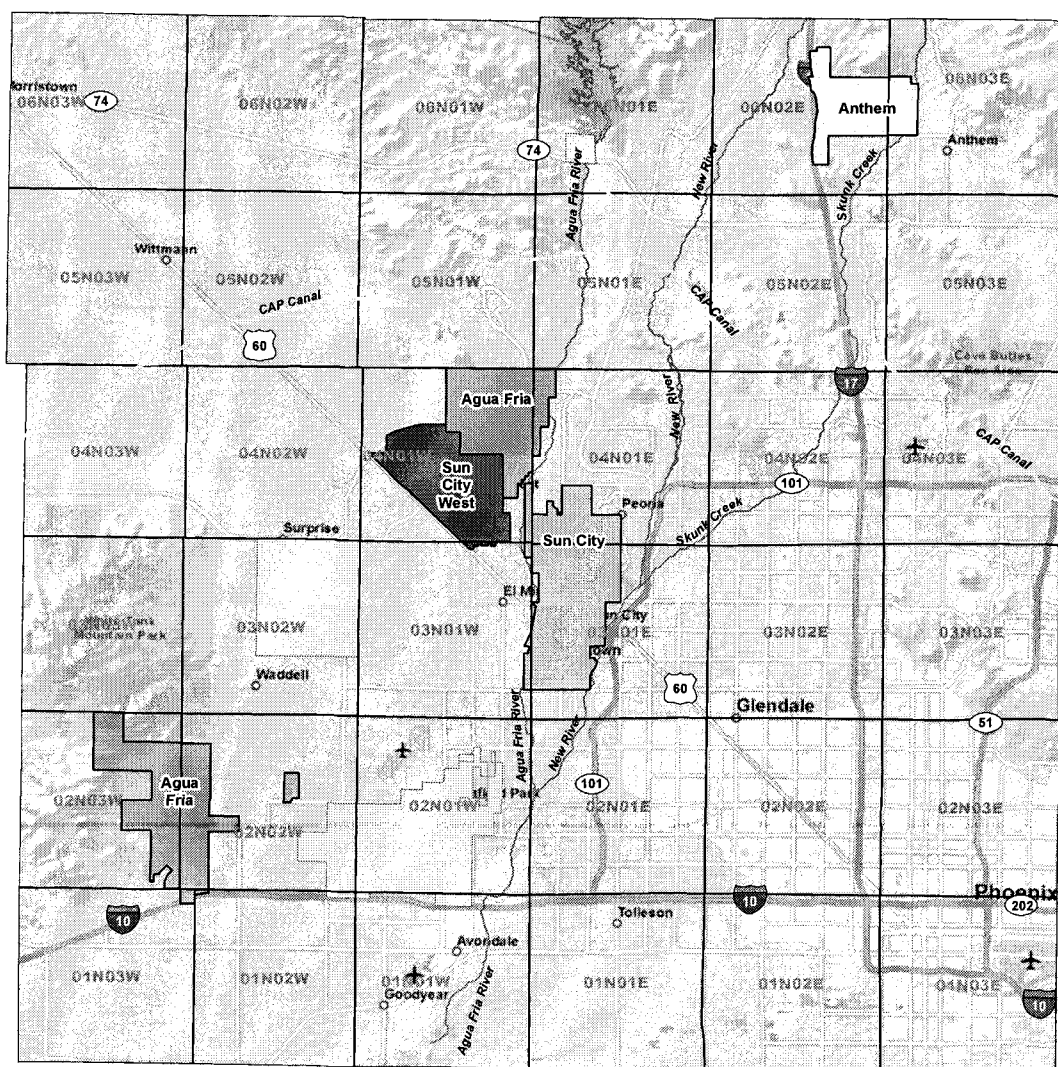
3. Service Agreement with Tolleson WWTP/System Capacity

The District service agreement with the City of Tolleson provides that the Tolleson WWTP will treat up to 5.2 million gallons per day (“MGD”) of wastewater for the District. The District had a daily average wastewater flow year of 3.5 MGD during the test. Therefore, Staff concludes that the District has adequate treatment capacity to serve its existing customer base and reasonable growth.

³ Via February 2 e-mail from the Company, the Company provided a copy of this study.

FIGURE 1

SUN CITY WASTEWATER DISTRICT CERTIFICATED AREA



Maricopa County

Arizona American Water Company (Sewer)

FIGURE 2

LOCATION OF SUN CITY WASTEWATER DISTRICT

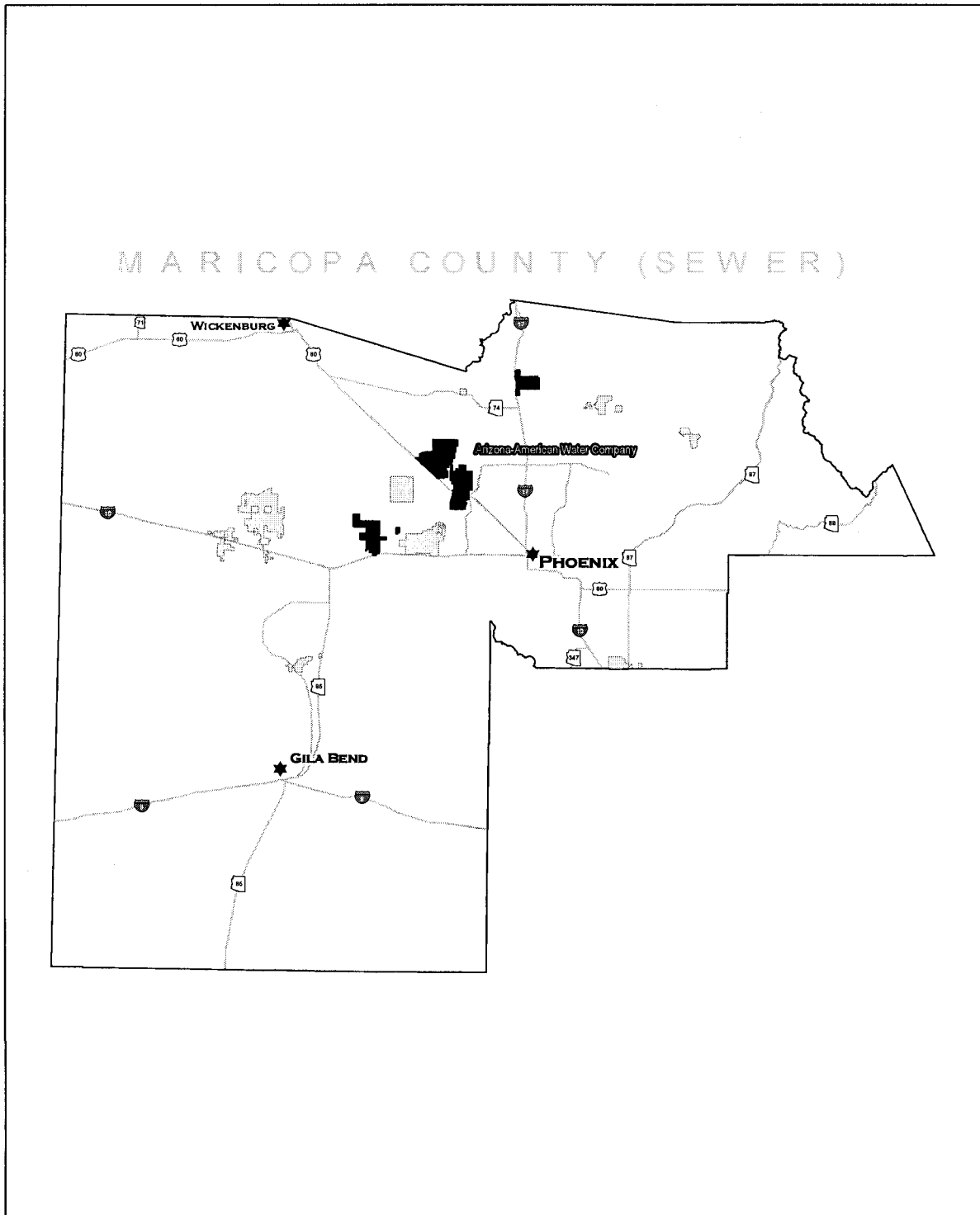


FIGURE 3A

SUN CITY WASTEWATER DISTRICT SYSTEMATIC FLOW DIAGRAM

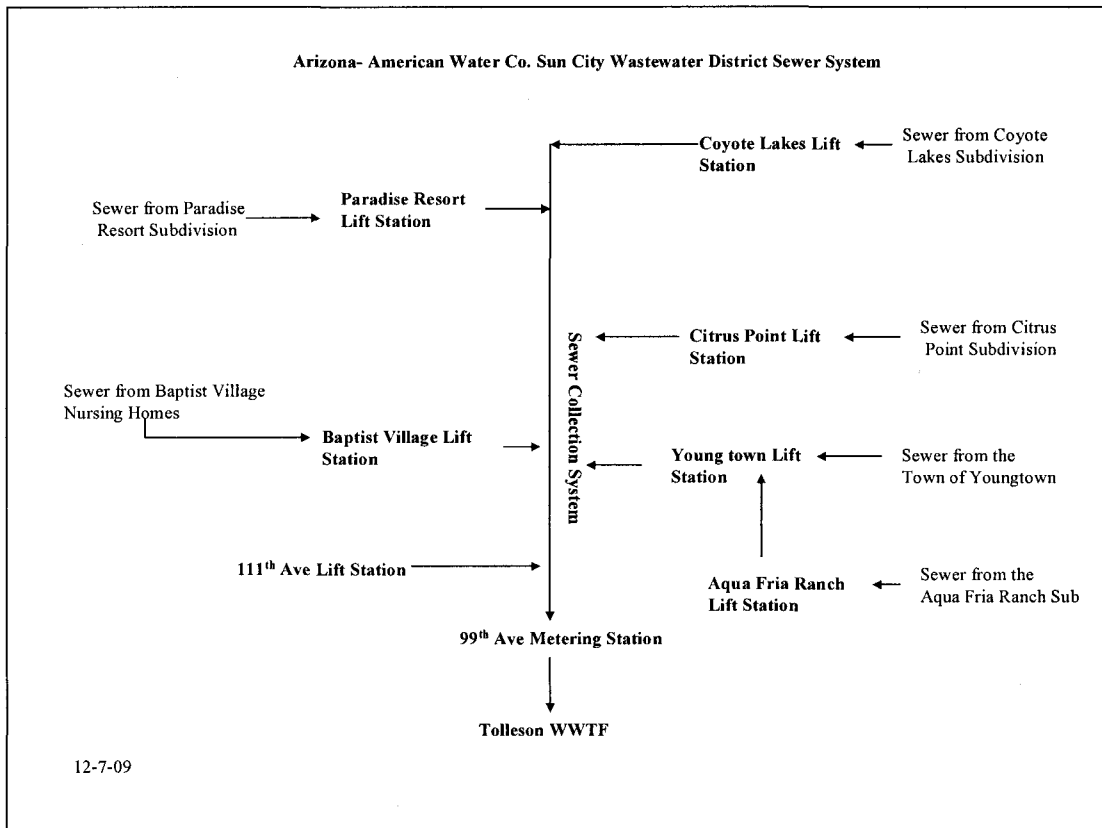


FIGURE 3B

SUN CITY WASTEWATER DISTRICT SYSTEMATIC FLOW DIAGRAM

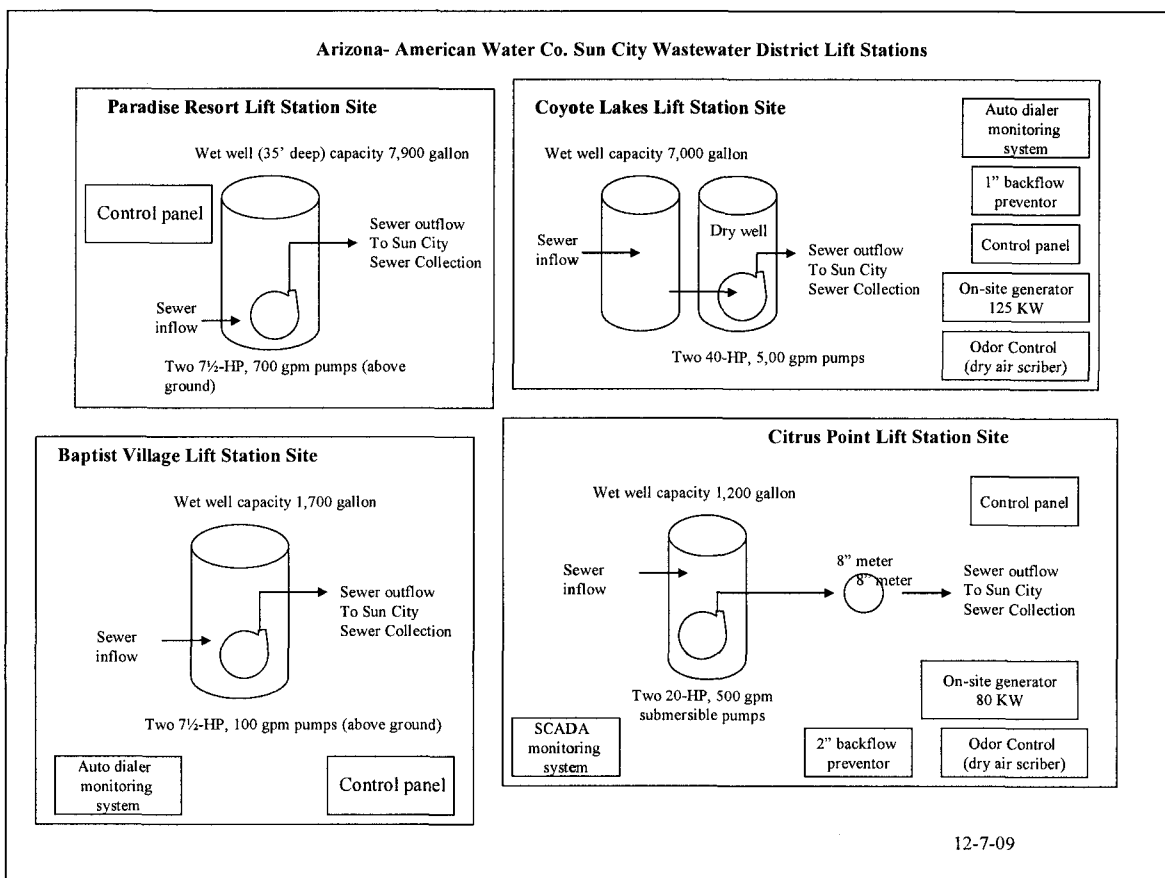


FIGURE 3C

SUN CITY WASTEWATER DISTRICT SYSTEMATIC FLOW DIAGRAM

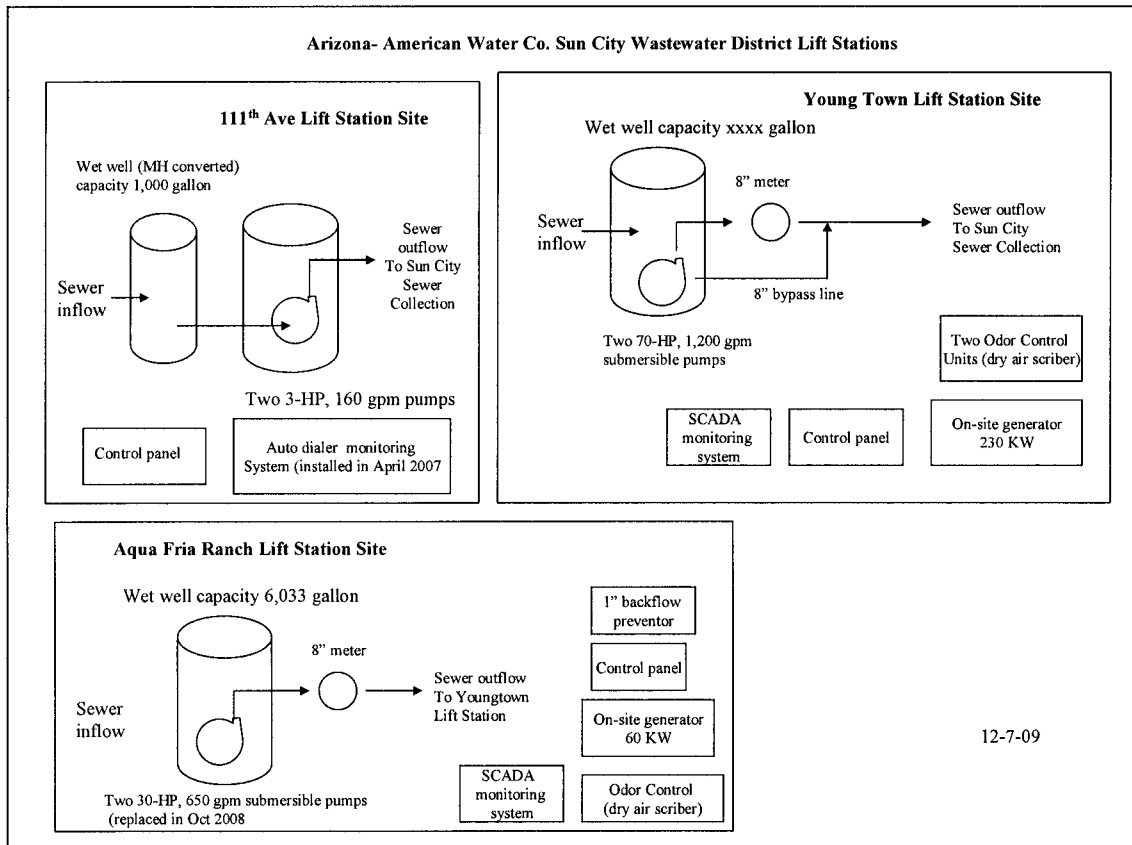


FIGURE 3D

SUN CITY WASTEWATER DISTRICT SYSTEMATIC FLOW DIAGRAM

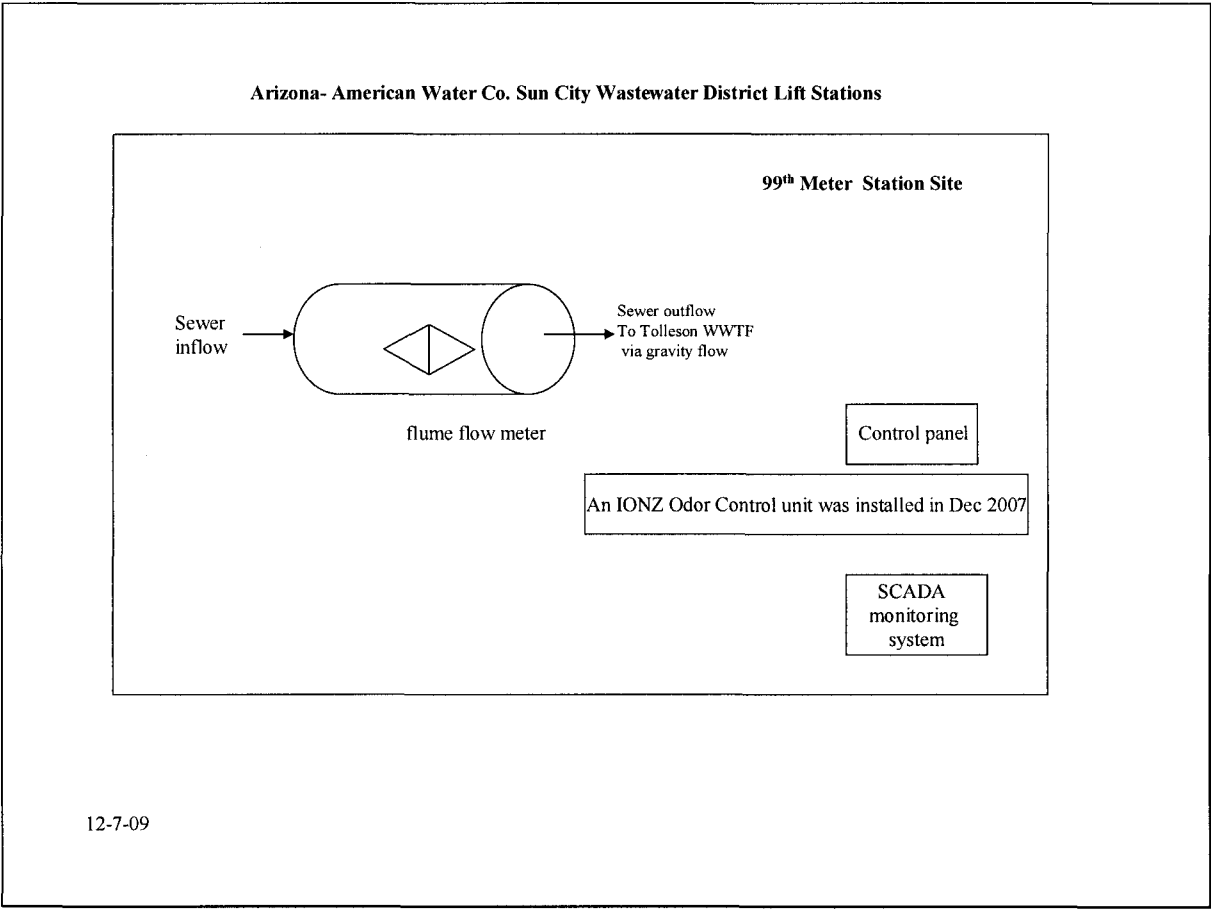


FIGURE 4A

DAILY AVERAGE WASTEWATER FLOW IN SUN CITY WASTEWATER DISTRICT

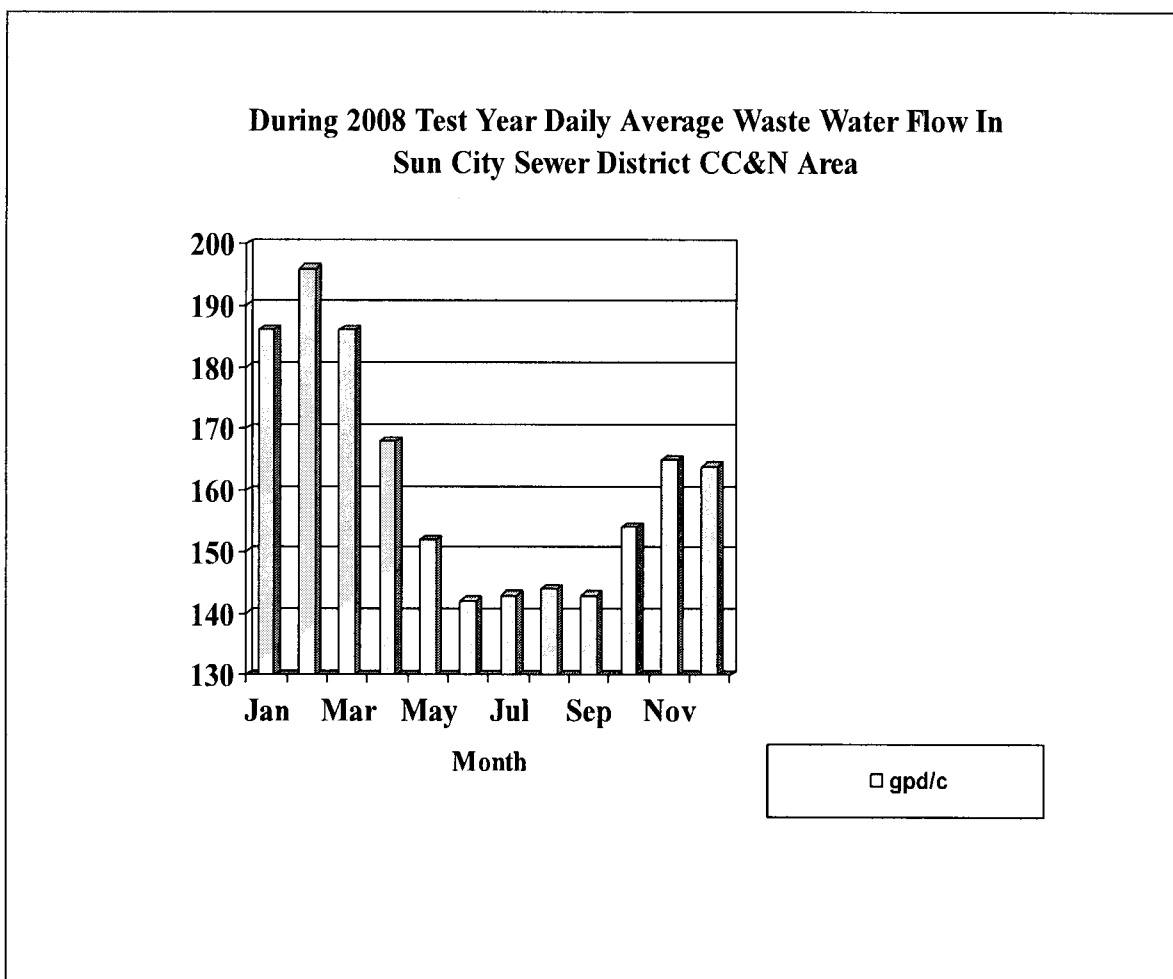


FIGURE 4B

WASTEWATER FLOW IN SUN CITY WASTEWATER DISTRICT

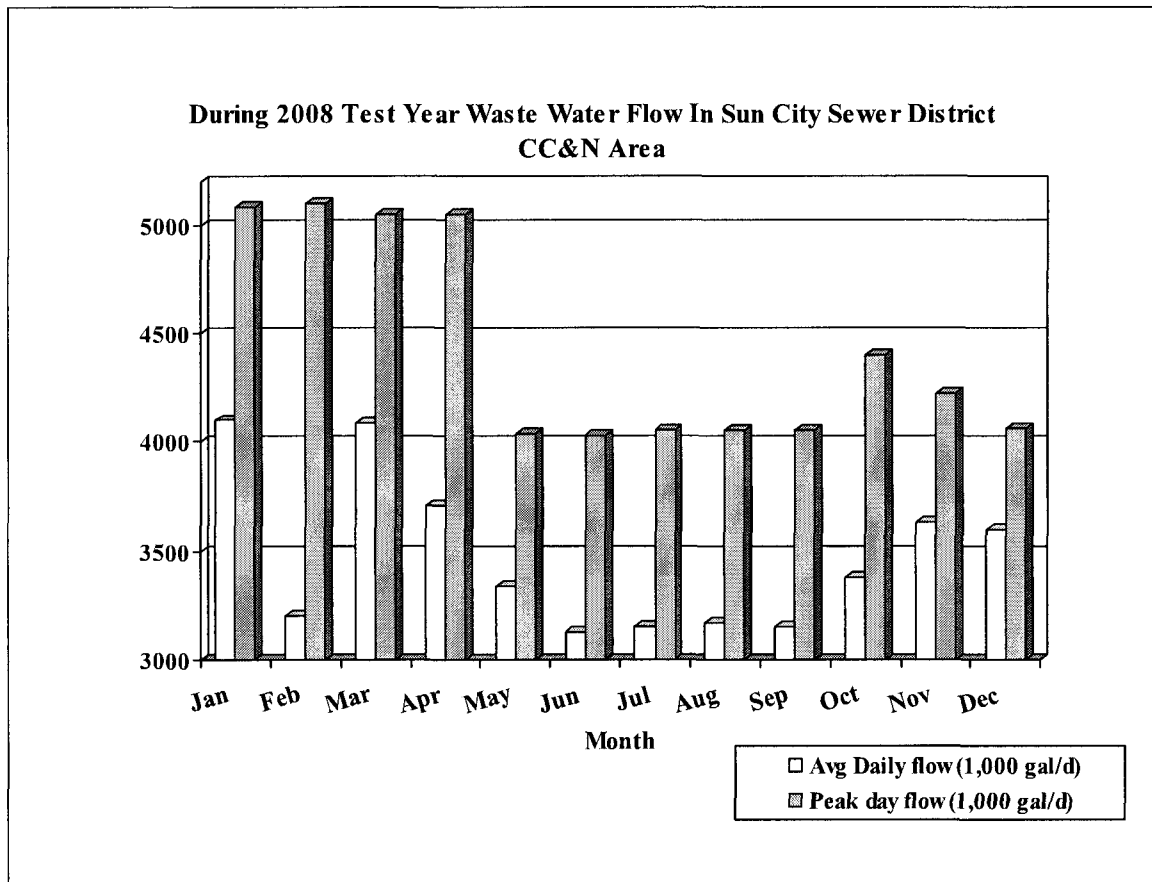
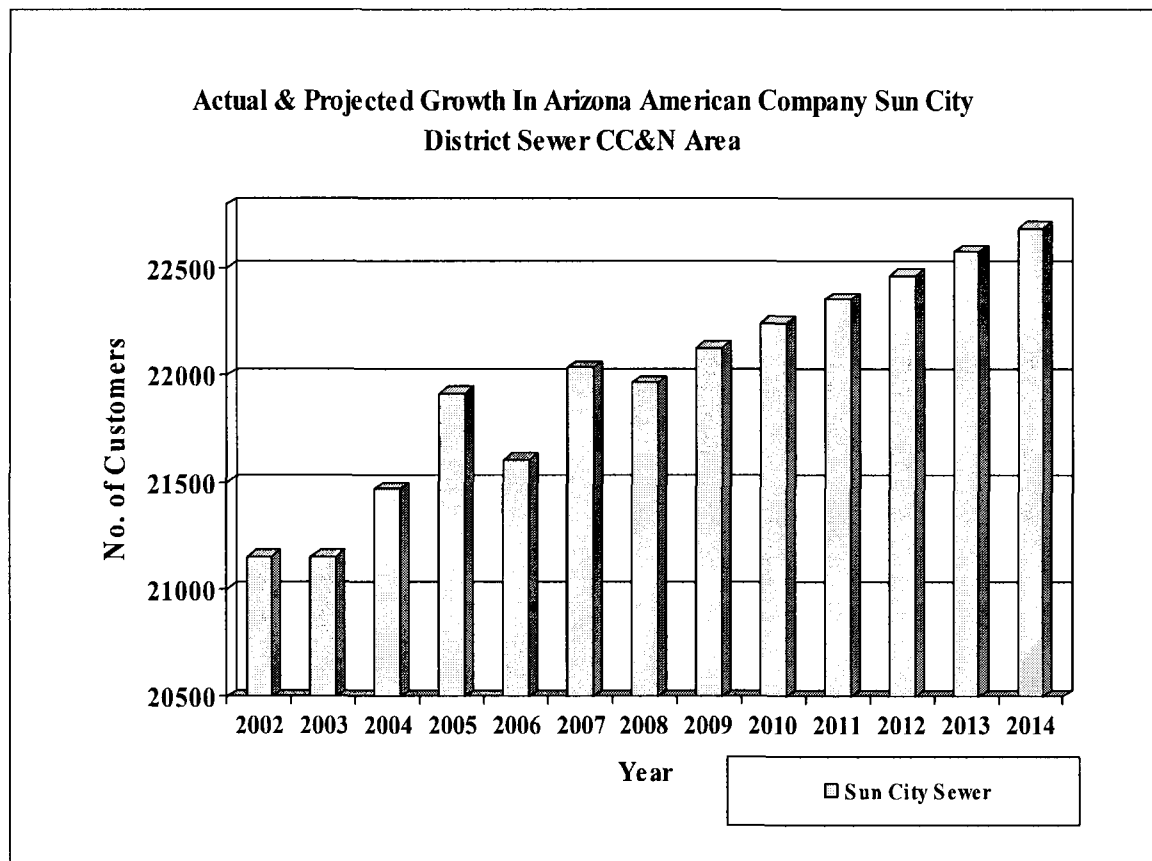


FIGURE 5

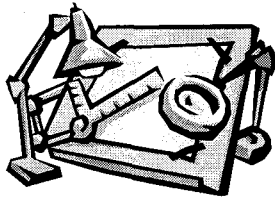
GROWTH IN SUN CITY WASTEWATER DISTRICT



**FIGURE 6
DEPRECIATION RATES FOR SUN CITY WASTEWATER DISTRICT**

NARUC Acct #	Company's Acct #.	Depreciable Plant	Decision #70209	Rate (%) Sun City Sewer District proposed	Staff Recommended Rate (%)
304	304510 ¹	Struct & Imp AG Cap Lease	N/A	0	0
	304600 ¹	Struct & Imp Office	N/A	0	0
	304620 ¹	Struct & Imp Leaseholds	N/A	0	0
340	340100 ¹	Office furniture & Equip	N/A	0	0
	340200 ¹	Computer & periph equip	N/A	0	0
	340300 ¹	Computer software	N/A	0	0
	340330 ¹	Computer software & other	N/A	0	0
341	341100 ¹	Trans equip lt duty trucks	N/A	0	0
343	343000 ¹	Tools, shop, garage equip	N/A	0	0
346	346100 ¹	Comm equip non-telephone	N/A	0	0
	346300 ¹	Comm. Equip other	N/A	0	0
347	347000 ¹	Misc equip	N/A	0	0
351	351000	Wastewater ("WW") Organization	0	0	0
352	352000	WW Franchise	0	0	0
353	353200	WW Collection: Land & Land Rights	0	0	0
354	354200WW	Structures and Improvements: collection	2.50	2.50	2.50
	354500	WW Structures and Improvements general	2.00	2.00	2.00
355	355400	WW Power Generation Equipment	3.33	3.33	3.33
360	360000	WW Force Mains	2.07	2.07	2.07
361	361100	WW collection Mains	2.03	2.03	2.03
362	362000	WW special collection structures	8.40	8.40	8.40
363	363000	WW sewer service connections	2.04	2.04	2.04
364	364000	Flow Measuring Devices	10.00	10.00	10.00
365	N/A	Flow Measuring Installations	5.00	N/A	5.00
370	N/A	WW Receiving Wells	N/A	N/A	3.33
371	371100	WW pump equipment: electric	5.42	5.42	5.42
380	380050Treat	ment & Disposal Equipment: Grit Removal	2.00	2.00	2.00
	380100	WW Treatment & Disposal Equipment: Sedimentation tanks/ACC		2.00	2.00
	380600	WW Treatment & Disposal Equipment other disposal		2.00	2.00
	380625	WW Treatment & Disposal Equip general treatment		2.00	2.00
	380650	WW Treatment & Disposal Equipment :Influent lift station	2.00	2.00	2.00
382	382000	WW Outfall Sewer Line	2.00	2.00	2.00
389	389100W	W Other Plant & Misc Equipment Int	4.98	4.98	4.98
	389600	WW oth Plt & Misc Equip	N/A	4.98	4.98
390	390000	WW Office Furniture & Equipments	4.59	4.59	4.59
390.1	N/A	WW Computer Equipments	4.55	N/A	4.55
391	391000	WW transportation equipment	25.00	20.00	20.00
393	393000	Wastewater Tools, Shop, Garage Equipment	4.47	4.47	4.47
394	394000	Lab equipments	3.71	N/A	0.00
395	N/A	Power Operated Equipment	5.14	N/A	0.00
396	396000	WW Communication Equipment	10.28	10.28	10.28
397	397000	WW Misc Equipment	5.10	5.10	5.10
398	398000	WW other tangible plant	10.30	0.00	0.00

Notes: 1. Per the Company response to Data Request No. STF 14.12 these accounts contain plant allocated to corporate use.



**Engineering Report for Arizona-
American Water Company, Sun City
West Wastewater District (Rates)
Docket No. WS-01303A-09-0343
By Dorothy Hains, P. E.
March 1, 2010**

EXECUTIVE SUMMARY

CONCLUSIONS

1. The Arizona American Water Company, Sun City West Wastewater District ("Sun City West Wastewater") is in full compliance with the Arizona Department of Environmental Quality ("ADEQ") for operation and maintenance, operator certification and discharge permit limits. (See §E of the report for discussion and details.)
2. Staff concludes that the Sun City West Wastewater's treatment plant has adequate capacity to treat the Sun City West area and the Corte Bella area and reasonable growth. (See § C of the report for discussion and details.)
3. A check of the Commission Utilities Division Compliance database showed there is currently no delinquent compliance item for the Company. (See § F of the report for discussion and details.)
4. Staff accepts the Company reported \$13,196 for water quality testing expense for this proceeding. (See § H of the report for discussion and details.)

RECOMMENDATIONS

1. It is recommended that the Sun City West Wastewater use depreciation rates as delineated in Figure 6. (See § G and Figure 6 of the report for discussion and details.)

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	Dewatered sludge transport bins
Solids disposal	Landfill

Lift Station ("LS")

	Location	No. Pumps	Pump (HP per pump)	Capacity (gallons per minute per pump)	Wet Well Capacity (gallons)
Bell Rd LS	Bell Rd & El Mirage Rd (12302 West Bell Rd)	4	250	2,800	49,400

Force Mains

Size (in inches)	Material	Length (feet)
18	Asbestos Cement Pipe ("ACP")	18,578

Collection Mains

Size (in inches)	Material	Length (feet)
4	Various	973
6	Various	1,840
8	Various	825,102
10	Various	24,565
12	Various	18,932
15	Various	20,089
18	Various	19,638
21	Various	5,933
24	Various	2,440
27	Various	0
30	Various	0
33	Various	0
36	Various	2,623
Undetermined	Various	3,324

Manholes & Cleanouts

Type	Quantity
Standard Manhole	2,679
Cleanouts	410

Services

Size (in inches)	Material	Length (feet)
4	N/A	N/A
6	N/A	N/A
8	N/A	N/A
12	N/A	N/A
15	N/A	N/A

C. WASTEWATER FLOW

At present time, the Northwest Valley plant treats 86% of the wastewater flowing from Sun City West Wastewater service area and 14% of the wastewater flowing from the Corte Bella Subdivision ("Corte Bella") which is in the Arizona-American Water Company Agua Fria Wastewater District for tariff and rates setting purposes. Table 2 below summarizes the wastewater flow data from the District during the test year of 2008 and Figure 4A, is graphic illustration of the same flow data. The highest average daily flow occurred in the month of February, when an average of 2.9 MGD sewage was treated. The lowest average daily flow during the year 2008 was 2.2 MGD which occurred in July. The highest peak daily flow for the year occurred in March when 3.3 MGD was treated in one day.

Table 2 Wastewater Flow to Northwest Valley Plant

Month	Total Volumes of Treated Wastewater (gallons)	Daily Average Flow (gallons/day)	Peak Day Flow (gallons)
Jan	84,548,000	2,727,355	3,227,000
Feb	81,106,000	2,896,643	3,204,000
Mar	88,215,000	2,845,645	3,281,000
Apr	79,194,000	2,639,800	3,101,000
May	73,996,000	2,386,968	2,777,000
Jun	66,890,000	2,229,667	2,505,000
Jul	68,829,000	2,220,290	2,502,000
Aug	70,646,000	2,278,903	2,645,000
Sep	69,132,000	2,304,400	2,688,000
Oct	76,212,000	2,458,452	2,829,000
Nov	79,451,000	2,648,367	2,966,000
Dec	79,655,000	2,569,516	2,844,000
Average	76,489,500	2,517,167	

Table 3 below summarizes the wastewater flow data from the Sun City West Wastewater service area during the test year of 2008 and Figure 4B, is graphic illustration of the same flow data. The highest average daily flow occurred in the month of February, when an average of 2.56 MGD sewage was treated. The lowest average daily flow during the year 2008 was 1.95 MGD which occurred in June. The highest peak daily flow for the year occurred in March when 2.88 MGD was treated in one day.

Table 3 Wastewater Flow from Sun City West Area

Month	Number of Connections	Total Volumes of Treated Wastewater (gallons)	Daily Average Flow (gallons/day)	Peak Day Flow (gallons)	Daily Average Flow (gal/day/customers)
Jan	14,984	74,159,000	2,392,226	2,819,000	160
Feb	14,985	71,695,000	2,560,536	2,814,000	171
Mar	14,986	77,889,000	2,512,548	2,879,000	168
Apr	14,963	69,907,000	2,330,233	2,735,000	156
May	14,927	64,857,000	2,092,161	2,427,000	140
Jun	14,920	58,598,000	1,953,267	2,175,000	131
Jul	14,910	60,827,000	1,962,161	2,202,000	132
Aug	14,914	62,303,000	2,009,774	2,319,000	135
Sep	14,922	61,079,000	2,035,967	2,362,000	136
Oct	14,947	66,638,000	2,149,613	2,453,000	144
Nov	14,960	69,377,000	2,312,567	2,566,000	155
Dec	14,968	69,417,000	2,239,258	2,470,000	150
Average			2,212,526		147

Although Corte Bella is in the Company's Aqua Fria District, it is physically adjacent to the Sun City West Sewer District. From engineering point view, using the Sun City West's treatment plant to treat wastewater from the Corte Bella area will benefit the Sun City West's plant. The reasons are: (1) the Sun City West's plant has 50% capacity not in use; (2) Corte Bella is a fast growing area, the plant can provide immediate needed service to Corte Bella; and (3) Corte Bella is twenty-miles north of the Company's Aqua Fria District treatment plant, but it is just a mile northwest from the Sun City West District plant. Therefore, it makes economic sense to provide service to the Corte Bella area by utilizing the Sun City West treatment plant.

Table 4 below summarizes the Corte Bella's flow data during the test year of 2008 and Figure 4C is graphic illustration of the same flow data:

Table 4 Wastewater Flow from Corte Bella Area

Month	Number of Connections	Total Volumes of Treated Wastewater (gallons)	Daily Average Flow (gallons/day)	Peak Day Flow (gallons)	Daily Average Flow (gal/day/customers)
Jan	2,428	10,389,000	335,129	408,000	168
Feb	2,448	9,411,000	336,107	390,000	159
Mar	2,467	10,326,000	333,097	402,000	163
Apr	2,499	9,287,000	309,567	366,000	146
May	2,535	9,139,000	294,806	350,000	138
Jun	2,577	8,292,000	276,400	330,000	128
Jul	2,622	8,002,000	258,129	300,000	114
Aug	2,655	8,343,000	269,129	326,000	123
Sep	2,703	8,053,000	268,433	326,000	121
Oct	2,745	9,574,000	308,839	376,000	137
Nov	2,774	10,074,000	335,800	400,000	144
Dec	2,816	10,238,000	330,258	374,000	133
Average			304,641		137

Staff anticipates that the rapid growth³ in the Corte Bella Subdivision and the adjacent Agua Fria District will have a significant impact on the flow patterns for the Sun City West District treatment plant in the future.

Staff concludes that the Northwest Valley treatment plant has adequate capacity to treat the Sun City West area and the Corte Bella area and reasonable growth.

D. GROWTH

Based on the service connection data in the Company's annual reports, the number of customers in the District increased from 14,919 at the end of 2003 to 14,968 by the end of 2008, with an average growth rate of 14 customers per year from 2003 to 2008. Based on the linear regression analysis, the District could have approximately 15,055 customers by the end of 2013. The following table summarizes actual and projected growth in the Company's existing certificated service area.⁴

Table 4 Actual and Projected Growth

Year	Nos. of Customers	
2003	14,919	Reported
2004	14,920	Reported
2005	14,915	Reported
2006	14,978	Reported
2007	14,985	Reported
2008	14,968	Reported
2009	14,998	Estimated
2010	15,012	Estimated
2011	15,027	Estimated
2012	15,041	Estimated
2013	15,055	Estimated

Using this projected growth Staff estimates that in 2013 customers in the area served by the District (less the Corte Bella area) will utilize 72 percent of the Northwest Valley treatment plant's capacity, the remaining 28 percent of capacity will be needed to serve customers located in the Corte Bella area⁵.

³ Estimate growth rate was 554 new connections per year from 2005 to 2008 in Corte Bella.

⁴ Since Corte Bella area is not included this projected growth rate may not be conclusive of when the Sun City West Wastewater area may reach build-out.

⁵ Reference to the Corte Bella area in this case would include the area also known as the North East Agua Fria area.

E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (“ADEQ”) COMPLIANCE

ADEQ and MCESD regulate the Northwest Valley Wastewater Treatment Plant under Wastewater Facility No. 04-37-018 and Aquifer Protection Permit No. P102667. Per the August 21, 2006 Compliance Status Report issued by ADEQ, the system is in full compliance for operation and maintenance, operator certification and discharge permit limits.

F. ARIZONA CORPORATION COMMISSION (“ACC”) COMPLIANCE

A check of the Commission Utilities Division Compliance database showed there is currently no delinquent compliance item for the Company.

G. DEPRECIATION RATES

Decision No. 70209 (dated March 20, 2008) approved the depreciation rates used by the District in this rate proceeding except that the Company reorganized the authorized rates utilizing the National Association of Regulatory Commissioners’ (“NARUC”) latest plant account matrix as presented in Figure 6. Staff recommends that the depreciation rates presented in Figure 6 by NARUC account be used by the District.

The Company has included some water accounts such as, Account # 307000 for wells & springs in the depreciation rate table in this rate process. Since the sewer system does not treat for potable water source such as wells and springs. Staff believes that this accounting treatment was done in error.⁶

H. OTHER ISSUES

1. Chemical Testing Expenses

The Company’s estimated that the annual wastewater testing expense for Northwest Valley is \$13,196. Staff estimates the annual chemical testing cost is \$13,242. (See Table 5)

⁶ See Response to Staff Data Request STF 14.13.

Table 5 Water Testing Cost (Sun City West Wastewater District – Northwest Valley Water Reclamation Facility WRF APP #P-102667)

Monitoring – Discharge	No. of tests per year (P-102667 required)	Cost per test (Co.'s)	Cost per test (Staff estimated)	Company Reported Total Costs	Staff Estimated Annual Cost
Bacteriological – Fecal Coliform (single sample maximum) –monthly	12	\$14	20	\$168	240
Bacteriological – Fecal Coliform (7 sample median) – monthly	12	0	20	0	240
Total Dissolved Solids –semi-annually	2	\$12 ¹	17	\$24 ¹	34
Anions (include bicarbonate, sulfate, carbonate, chloride) – semi-annually	2	\$71 ¹	95	\$142 ¹	190
Cations (including Ca, Mg, K, Na, Cu, Fe, Mn & Zn) – semi-annually	2	N/A ¹	104	0	208
Total Metals (Inorganics – Priority Pollutants including fluoride & free cyanide) – quarterly	2	\$233 ¹	252	\$932 ¹	504
Total Trihalomethanes – semi-annually-	2	N/A	110	0	220
Gross α (including Ra-226 excluding Rn &U) - quarterly	4	\$340	60	\$1,360	240
Gross β - quarterly	4	0	60	0	240
Ra-226 & Ra-228 - quarterly	4	0	220	0	880
Total Nitrogen (five sample rolling geometric mean) - monthly	12	\$123 ¹	125	\$1,476 ¹	1,500
SOCs – semi-annually	2	\$300 ¹	350	\$600 ¹	700
VOCs – semi-annually	2	\$160 ¹	220	\$320 ¹	440
Total				\$5,022¹	5,636

Note: 1. Reference to the Company Response to Data Request #9.6.

Monitoring – Ground Water (3 monitoring wells)	No. of tests per year (P-	Cost per test (Co's)	Cost per test (Staff	Company Reported Total	Staff Estimated
--	---------------------------	----------------------	----------------------	------------------------	-----------------

	102667 required)		estimated)	Costs	Annual Cost
Total Nitrogen (Sum of nitrite, nitrate and TKN) - quarterly	12	\$65	0	\$780	0
Total Kjeldahl Nitrogen - monthly	12	0	40	0	480
Nitrate-nitrite as N - quarterly	12	0	25	0	300
Fecal coliform - quarterly	12	\$11	20	\$132	240
Total coliform - quarterly	12	\$15	20	\$180	240
Total Metals (Inorganics – Priority Pollutants including fluoride, free cyanide) - quarterly	12	\$233 ¹	252	\$2,796 ¹	3,024
Total Trihalomethanes – semi-annually	6	N/A	110	0	660
VOCs – semi-annually	6	\$160 ¹	220	\$960 ¹	1,320
SOCs – semi-annually	6	\$300 ¹	350	\$1,800 ¹	2,100
Total Dissolved Solids –semi-annually	2	\$12 ¹	17	\$24 ¹	34
Cations (including Ca, Mg, K, Na, Cu, Fe, Mn & Zn) – semi annually	2	\$71 ¹	104	\$142 ¹	208
Radio Chems	0	\$340		\$1,360	0
Total				\$8,174	8,606

The Company calculated its total wastewater testing cost for Sun City West Wastewater is \$13,196 (sum of \$5,022 and \$8,174). Staff estimated that total testing costs for Sun City West Wastewater is \$13,242 (sum of \$5,636 and \$6,814).

Staff believes that the Sun City West Wastewater proposed total testing cost of \$13,196 for Sun City West Wastewater District is reasonable, should be adopted.

2. Off-site Hookup Fee Tariff

There is no existing Off-site Hookup Fee Tariff.

Figure 1

SUN CITY WEST WASTEWATER DISTRICT CERTIFICATED AREA

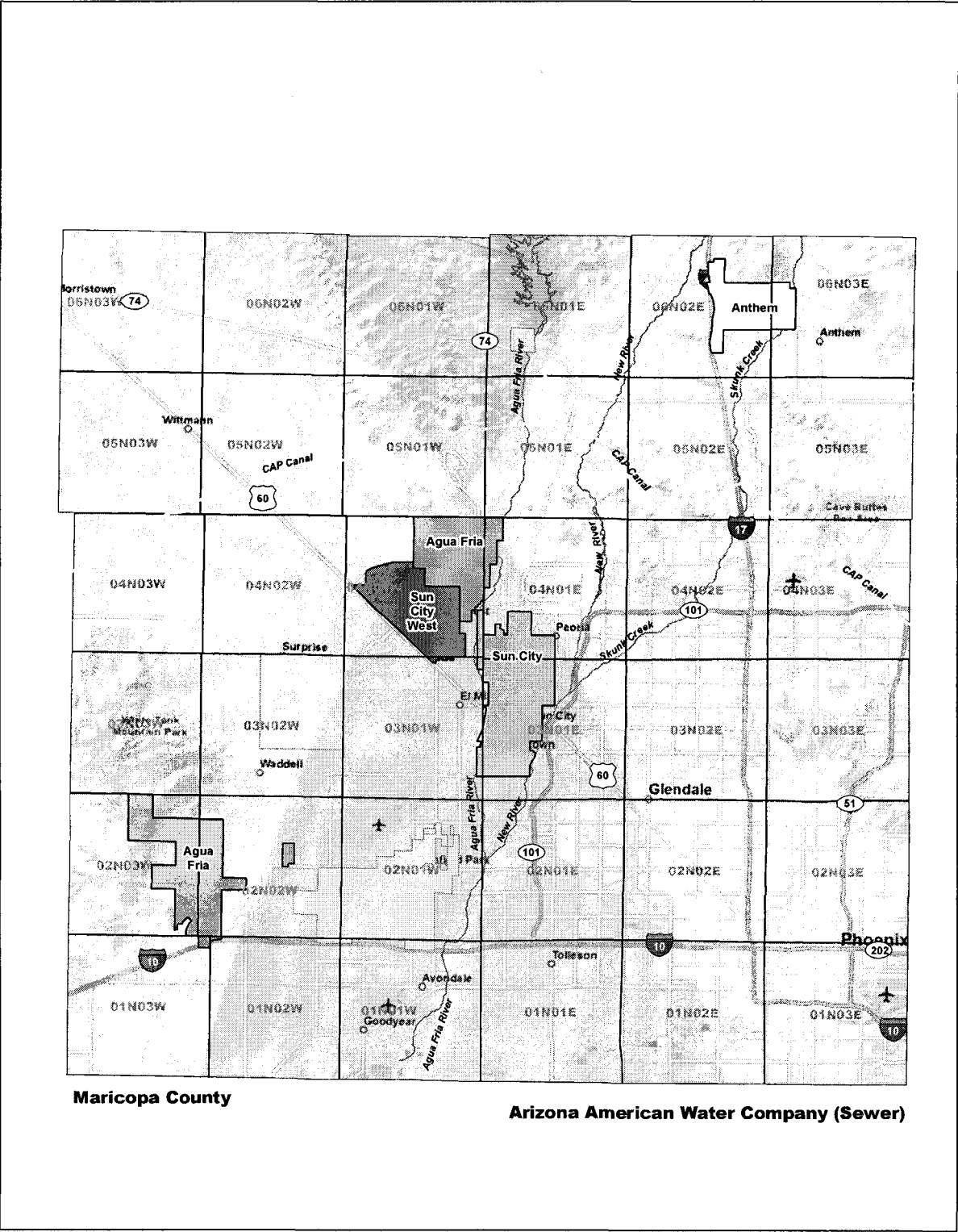


Figure 2

LOCATION OF SUN CITY WEST WASTEWATER DISTRICT

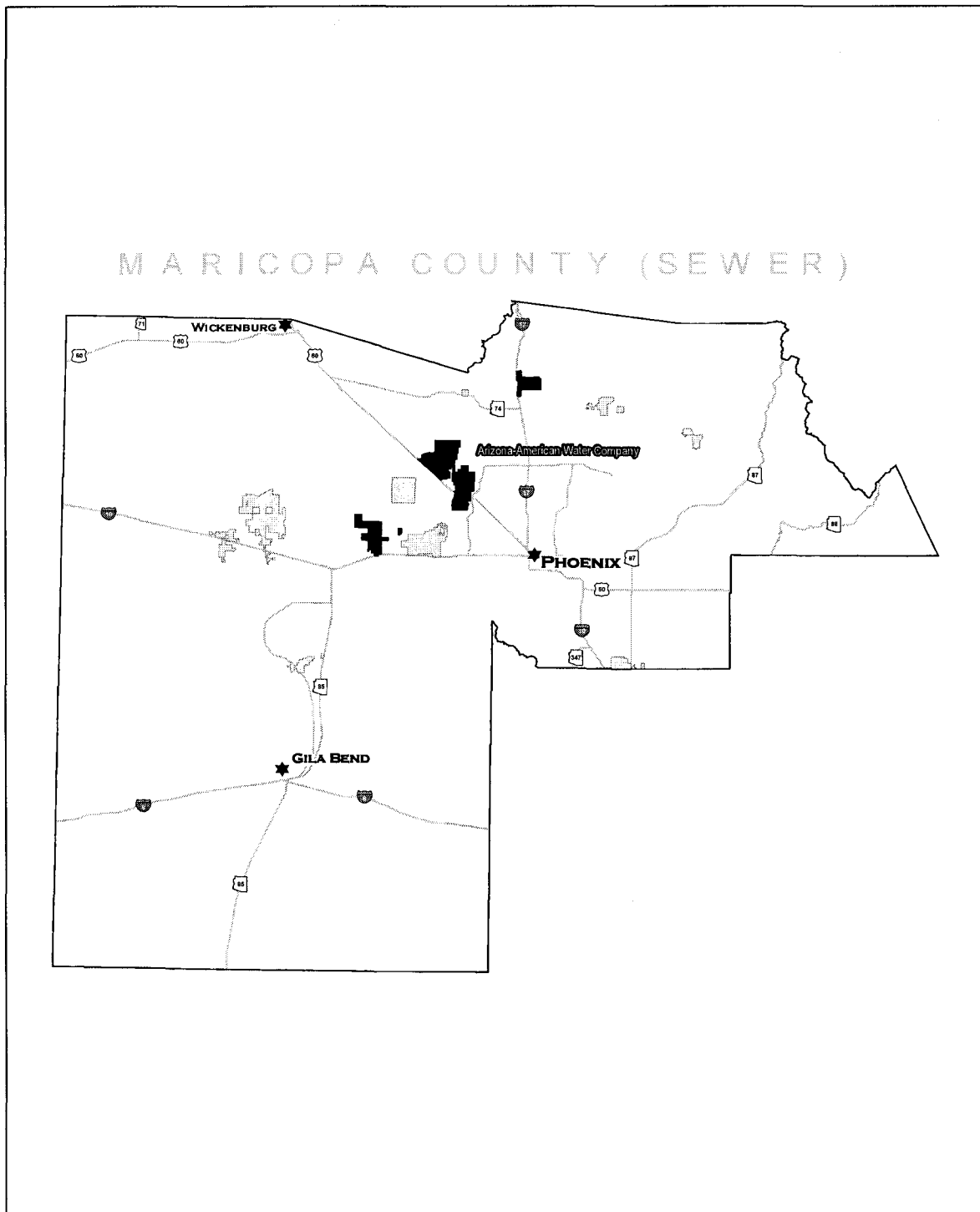


FIGURE 3A

SUN CITY WEST WASTEWATER DISTRICT SYSTEMATIC FLOW DIAGRAM

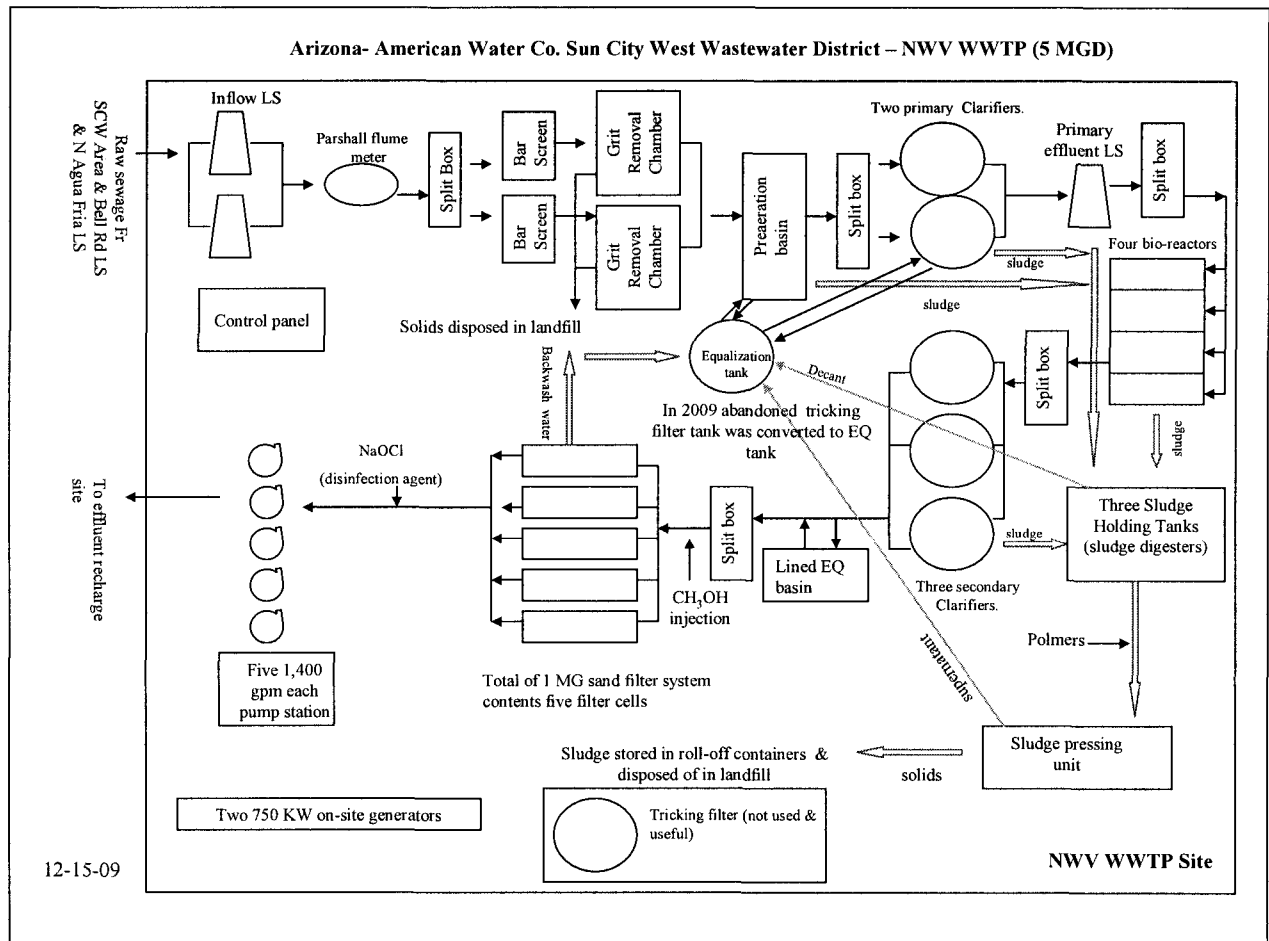


FIGURE 3B

SUN CITY WEST WASTEWATER DISTRICT SYSTEMATIC FLOW DIAGRAM

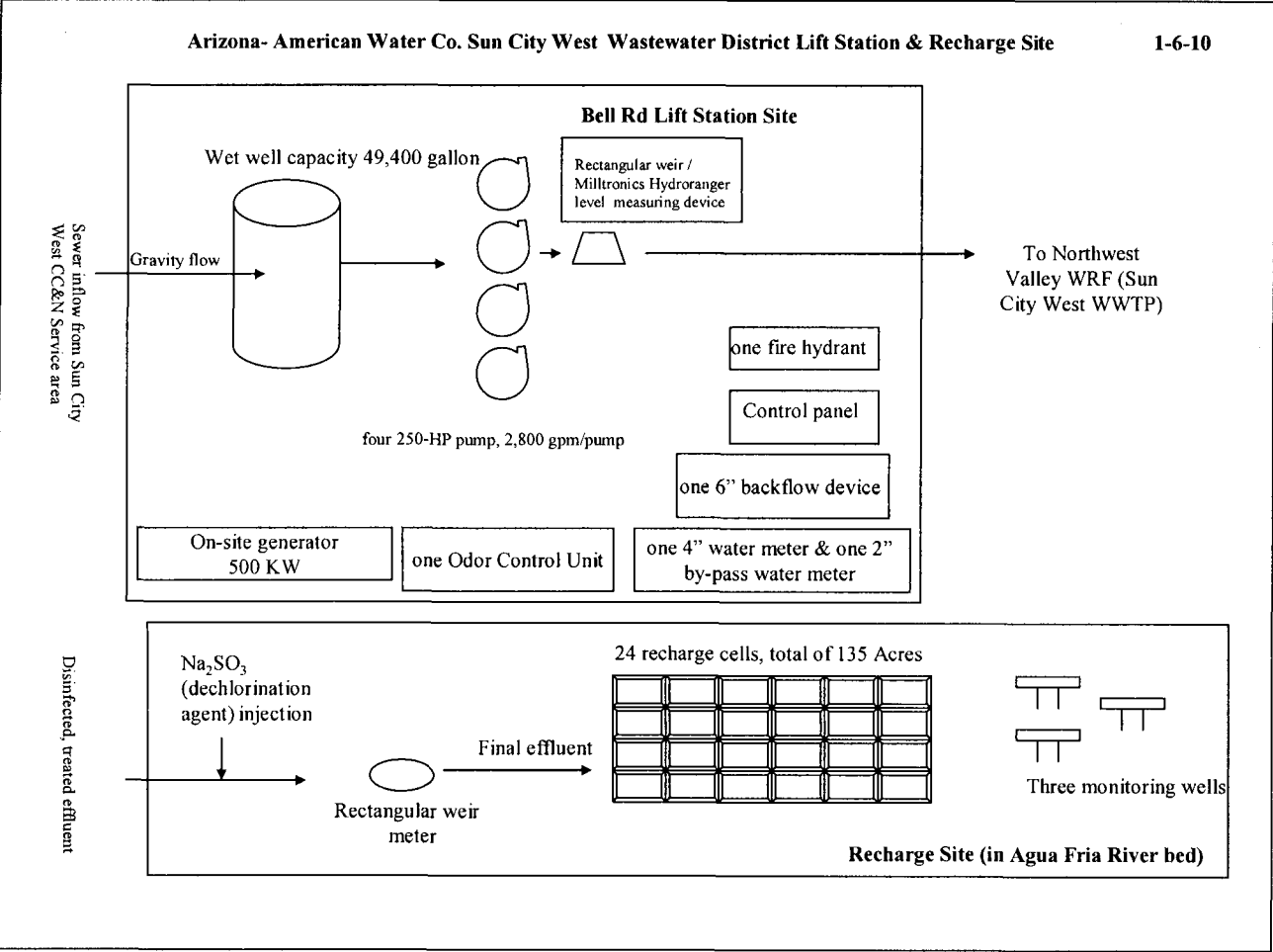


FIGURE 4A

WASTEWATER FLOW FROM SUN CITY WEST WASTEWATER DISTRICT

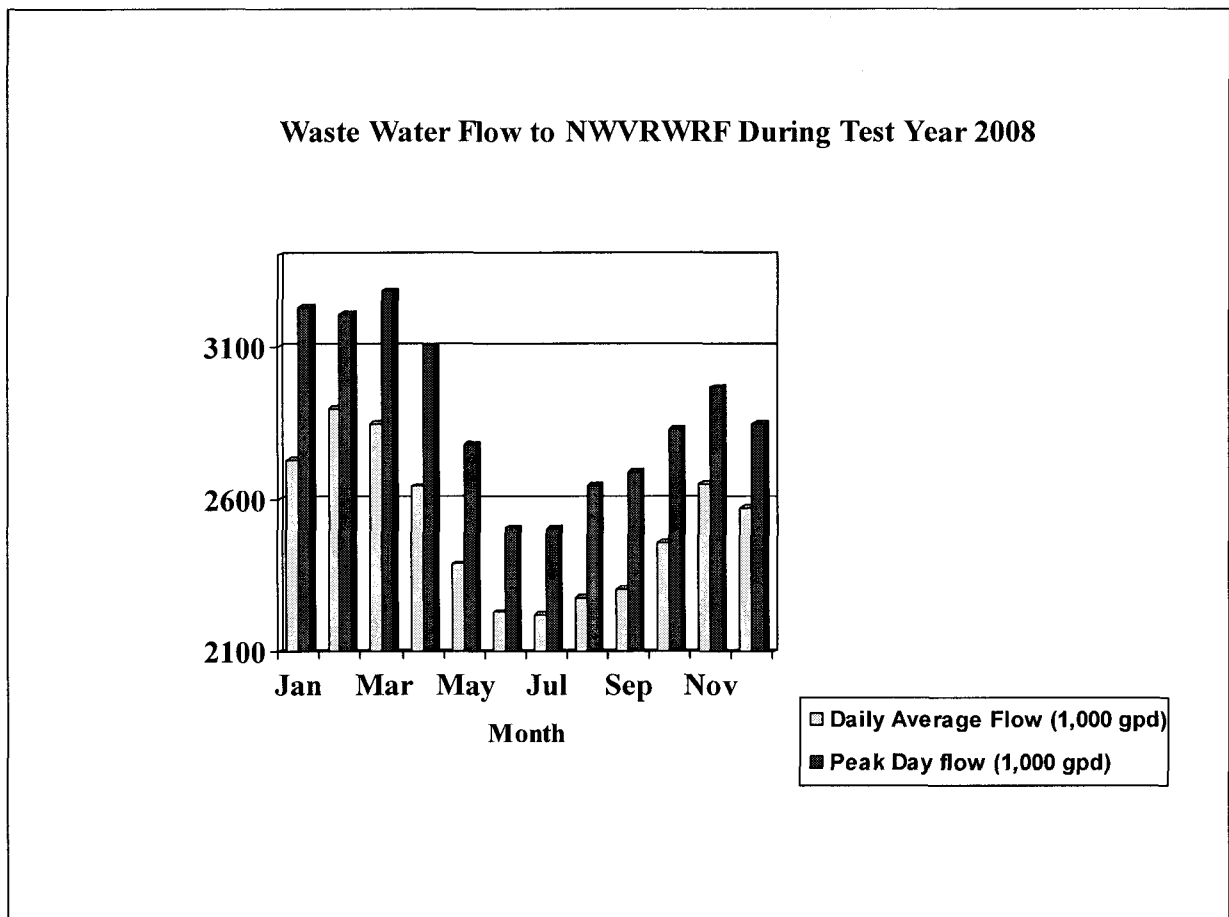


FIGURE 4B
WASTEWATER FLOW IN SUN CITY WEST WASTEWATER DISTRICT SERVICE
AREA

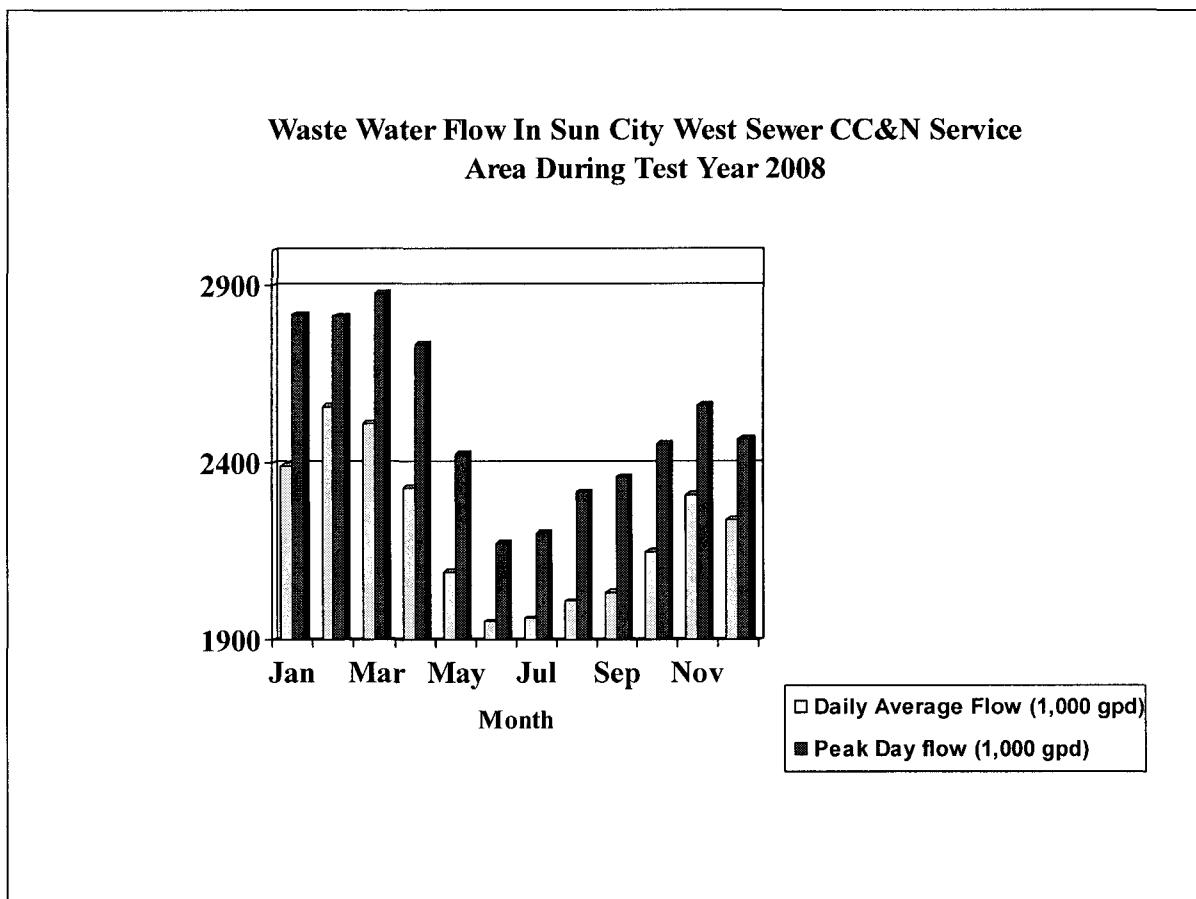


FIGURE 4C
WASTEWATER FLOW FROM NEAF AREA

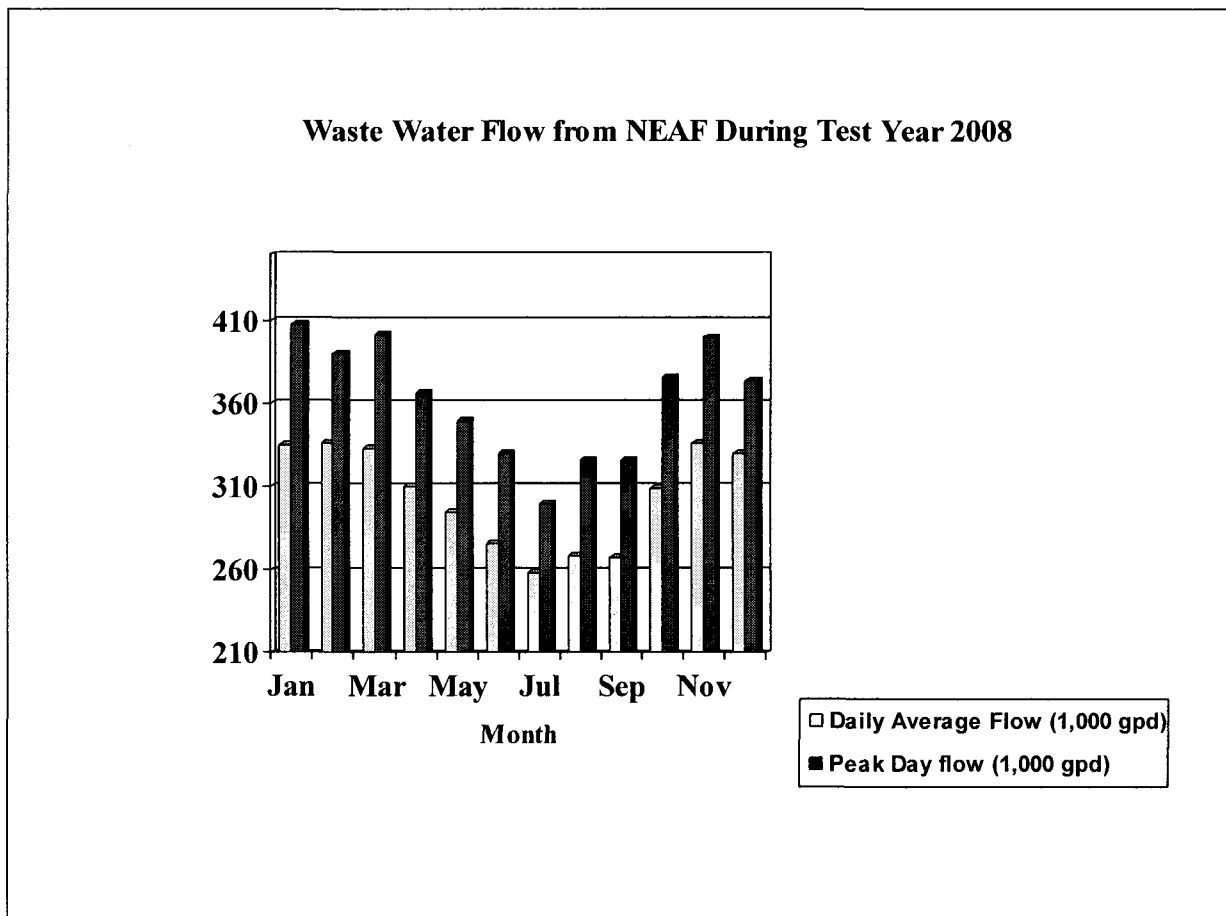


FIGURE 5

**PROJECTED AND ACURATE GROWTH IN SUN CITY WEST WASTEWATER
DISTRICT**

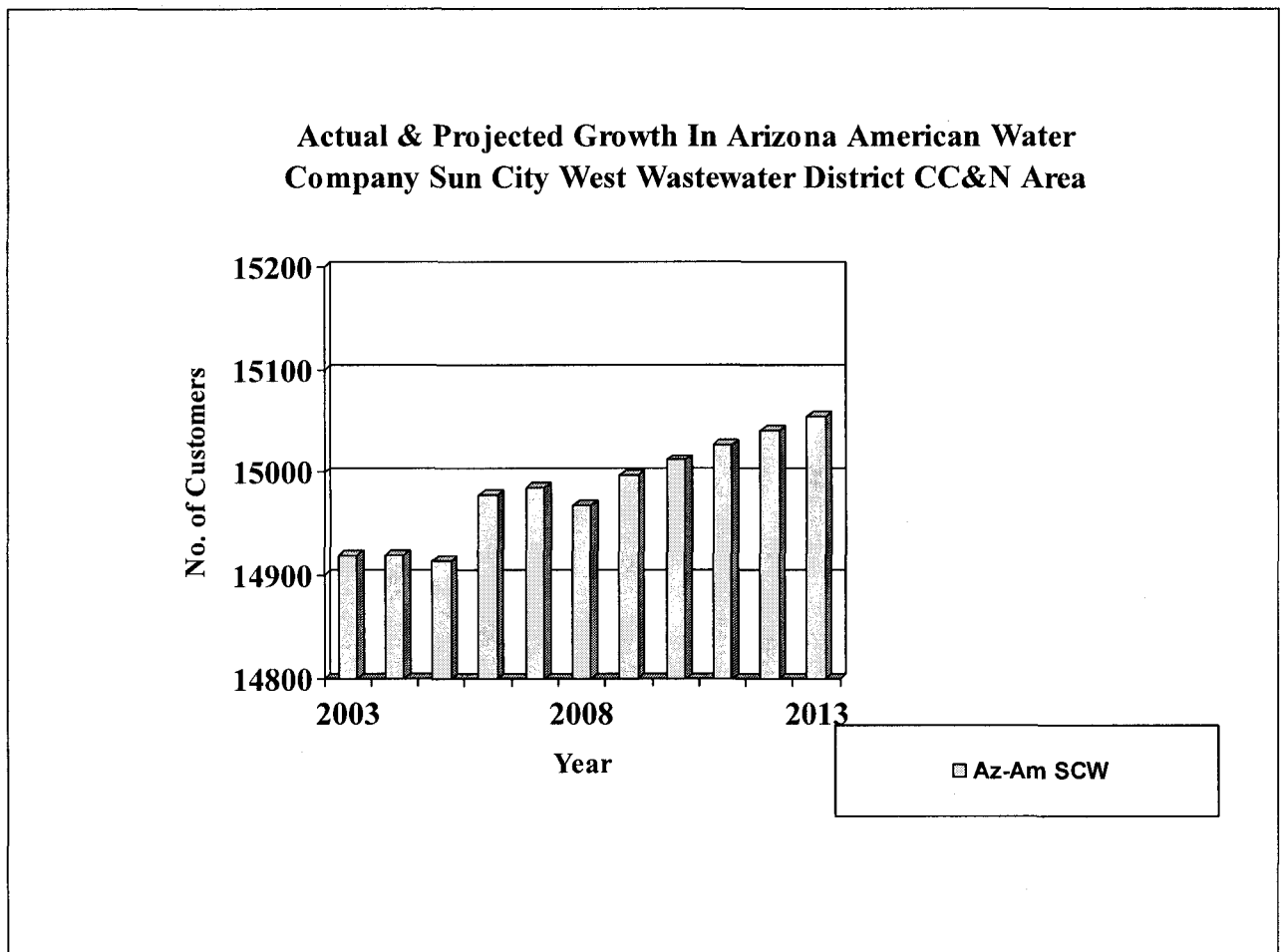


Figure 6 Depreciation Rates for Sun City West - Wastewater

NARUC Acct #	Company's Acct #.	Depreciable Plant	Decision # 70209	Rate (%) Sun City West Sewer District proposed	Staff Recommended Rate (%)
304	304100 ¹	Structure & Imp SS	2.50 ²	2.50	2.50
304	304200 ¹	Structure & Imp P	1.67 ²	1.67	1.67
304	304510 ¹	Structure & Imp AG & Cap lease	N/A ²	0	0
304	304600 ¹	Structure & Imp Office	4.63 ²	1.67	1.67
304	304620 ¹	Structure & Imp leasehold	1.67	4.63	4.63
304	304800 ¹	Structure & Improvement Misc	0 ²	4.63	1.67
307	307000 ¹	Wells & Springs	2.52 ²	2.52	2.52
340	340100 ¹	Office Furniture & Equip	4.59 ²	4.04	4.04
340	340200 ¹	Comp & Periph Equip	10 ²	10	10
340	340300 ¹	Computer Software	0 ²	25.00	25.00
340	340330 ¹	Computer Software Other	0 ²	25.00	25.00
340	340500 ¹	Other Office Equip	0 ²	0	0
341	341100 ¹	Transportation Equip – light duty trucks	25.00 ²	20.00	20.00
343	343000 ¹	Tools, shop and garage	4.02 ²	4.47	4.47
344	344000 ¹	Lab equip	3.71 ²	0	0
346	346100 ¹	Comm. Equip – non-telephone	10.30 ²	0	0
346	346300 ¹	Comm. Equip other	4.93 ²	0	0
347	347000 ¹	Misc equipment	N/A ²	0	0
351	351000	Wastewater (“WW”) Organization	0	0	0
352	352000	WW Franchise	0	0	0
353	353200	WW Collection: Land & Land Rights	0	0	0
	353500	WW general: Land & Land Rights	0	0	0
354	354200	WW Collection: Structures and Improvements	5.00	5.00	5.00
	354300	WW Structures and Improvements: System Pump Plant	5.00	5.00	5.00
	354400	WW Structures and Improvements: TDP	N/A	N/A	0
	354500	WW Collection: Structures and Improvements general	1.67	1.67	1.67
355	355200	WW Power Generation Equipment - Collection	3.33	N/A	0.00
	355300	WW Power Generation Equipment - SPP	N/A	3.33	3.33
360	360000	WW Force Mains	2.07	2.07	2.07
361	361100	WW collection Mains	2.04	2.04	2.04
362	362000	WW special collection structures	8.40	8.40	8.40
363	363000	WW sewer service connections	2.04	2.04	2.04
364	364000	Flow Measuring Devices	10.00	N/A	10.00
365	N/A	Flow Measuring Installations	5.00	N/A	5.00
370	370000	WW Receiving Wells	N/A	N/A	3.33
	380650	WW Treatment & Disposal Equipment :Influent lift station	5.00	5.00	5.00
371	371100	WW pump equipment: electric	5.42	10.00	10.00
375	380400	WW Treatment & Disposal Equipment Aux Effluent Treatment	5.00	5.00	5.00
380	380000	Treatment & Disposal Equipment	5.00	5.00	5.00
	380050	Treatment & Disposal Equipment: Grit Removal		5.00	5.00
	380100	WW Treatment & Disposal Equipment: Sedimentation tanks/ACC		5.00	5.00
	380200	Treatment & Disposal Equipment: Sludge/Effluent removal		5.00	5.00
	380250	Treatment & Disposal Equipment: Sludge digester tank		5.00	5.00

Arizona American Water Company
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	380300	Treatment & Disposal Equipment: sludge dry/filter		5.00	5.00
	380350	Treatment & Disposal Equipment: sec trmt filt		5.00	5.00
	380400	WW Treatment & Disposal Equipment Aux Effluent Treatment		5.00	5.00
	380500	Treatment & Disposal Equipment: chemical treatment plant		5.00	5.00
	380600	WW Treatment & Disposal Equipment – other disp		5.00	5.00
	380625	WW TD Equip – Gen Trmt		5.00	5.00
381	381000	WW Plant Sewers	N/A	N/A	5.00
382	382000	WW Outfall Line	5.00	5.00	5.00
389	389100	WW Other Plant & Misc Equipment Int	4.98	6.67	4.98
390	390000	WW Office Furniture & Equipments	4.59	4.59	4.59
	390100	WW Computer Equip	N/A	10.00	10.00
390.1	N/A	Computer Equipments	4.55	N/A	4.55
391	391000	WW transportation equipment	25.00	20.00	20.00
392	392000	WW stores equipment	3.91	3.91	3.91
393	393000	Wastewater Tools, Shop, Garage Equipment	4.47	4.47	4.47
394	394000	Lab equipments	3.71	10.00	10.00
395	395000	Power Operated Equipment	5.02	5.02	5.02
396	396000	Communication Equipment	10.30	10.30	10.30
397	397000	WW Misc Equipment	5.10	5.10	5.10
398	398000	WW other Tangible Plant	N/A	N/A	0.00

Notes: 1. Per the Company response to Data Request No. STF 14.12 these accounts contain plant allocated to corporate use.
2. Rates are approved for the Arizona American Water Company Sun City West Water District in Decision #70209.

A. LOCATION OF DISTRICT

Arizona American – Sun City West Wastewater District (“Sun City West Wastewater” or “District”) serves approximately 15,000 customers in the Town of Sun City West which is located northwest of the City of Phoenix in Maricopa County. Figure 1 describes the location of the Company within Maricopa County, and Figure 2 describes the CC&N area of Sun City West Wastewater.

B. DESCRIPTION OF THE WASTEWATER SYSTEM

The plant facilities were visited on October 27, 2009 by Dorothy Hains, Utilities Engineer, in the accompaniment of Doug Griffith, Wastewater Operation Manager and Ygnasio Samarripa, Northwest Valley Reclaimed Water Recreation Facility (“Northwest Valley”) Operation Supervisor.

The wastewater system consists of a 5 million gallon per day (“MGD”) biological nutrient removal (“BNR”) treatment plant¹ functions include nitrification/denitrification, filtration, and disinfection/dechlorination. After dewatering, dry sludge is disposed of at a landfill. Final treated effluent discharges through a concrete lined effluent channel and flow measuring weir to the recharge basins with an effective surface area of approximately 135 acres and a total land area of 95 acres².

Figures 3A and 3B are schematics of the system. The following tables describe the system in more detail.

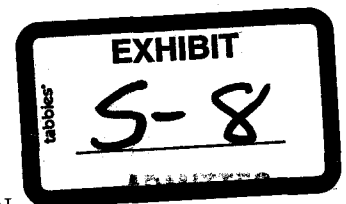
Table 1. Northwest Valley Plant

Northwest Valley Wastewater Treatment Plant

Process	Equipment
headwork	Flow measuring, Grit chamber, Bar screen, Odor control devices
Primary treatment	Aeration tank, Primary clarifier, Odor control device, pH adjustment
Secondary treatment	Activated sludge, Biological nutrient removal (nitrification /denitrification), Secondary clarifier, Equalization tank, Methanol injection
Filtration	Rapid Sand Filters
Disinfection	Hypochlorite Injection at filter effluent
dechlorination	Sodium bisulfite injection
Effluent disposal	Surface impoundments
Sludge Disposal	Aerobic digester, sludge thickening, settling and decanting clear liquid, Polymer as flocculants to aid in dewatering, Belt press for dewatering,

¹ Currently the plant is treating the sewage to Class B+ effluent standards which is suitable for golf course reuse.

² According to the Company effluent recharge will benefit the Company and its customers, because effluent recharge “groundwater banking” will allow it to harvest more groundwater in the future.



BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF)
ARIZONA-AMERICAN WATER COMPANY)
FOR DETERMINATION OF THE CURRENT)
FAIR VALUE OF ITS UTILITY PLANT AND)
PROPERTY AND FOR INCREASES IN ITS)
RATES AND CHARGES BASED THEREON)
FOR UTILITY SERVICE BY ITS ANTHEM)
WATER DISTRICT AND ITS SUN CITY)
WATER DISTRICT)

DOCKET NO. W-01303A-09-0343

IN THE MATTER OF THE APPLICATION OF)
ARIZONA-AMERICAN WATER COMPANY)
FOR DETERMINATION OF THE CURRENT)
FAIR VALUE OF ITS UTILITY PLANT AND)
PROPERTY AND FOR INCREASES IN ITS)
RATES AND CHARGES BASED THEREON)
FOR UTILITY SERVICE BY ITS ANTHE/AGUA)
FRIA WASTEWATER DISTRICT, ITS SUN)
CITY WASTEWATER DISTRICT AND ITS SUN)
CITY WEST WASTEWATER DISTRICT,)

DOCKET NO. SW-01303A-09-0343

SURREBUTTAL TESTIMONY

OF

DOROTHY HAINS

UTILITIES ENGINEER

UTILITIES DIVISION

APRIL 15, 2010

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EXHIBIT

Depreciateion Rates for Sun City Water District (Revised)	Figure 6
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I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Dorothy Hains. My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Dorothy Hains who has previously filed testimony in this rate proceeding?

A. Yes.

Q. What is the purpose of your surrebuttal testimony?

A. In my testimony I will respond to two issues raised in the Company's rebuttal testimony. (1) the Company argues against Staff's recommended depreciation rates for Account No. 380625 (Treatment Disposal Equipment – General Treatment), for Account No. 380650 (Treatment Disposal Equipment – Influent Lift Station) and for Account No. 390000 (Office Furniture and Equipment), (2) the Company argues that without the 2nd clarifier in Verrado Wastewater Treatment Plant (in Agua Fria Wastewater District) that the Plant's treatment capacity would be reduced. I also have one typographical error to correct.

II. ANTHEM/AGUA FRIA WASTEWATER DISTRICT

Depreciation Rates for Account No. 380625

Q. In Decision No. 70372, did the Commission approve any depreciation rates for Account No. 380625 (Treatment Disposal Equipment – General Treatment)?

A. No. Account No. 380625 is a new proposed account in this rate application.

1 **Q. Did the Company provide any documentation to support its proposed 8.4%**
2 **depreciation rates for this account?**

3 A. No.
4

5 **Q. Please explain how Staff developed its recommended depreciation rate?**

6 A. In Decision No. 70372, the Commission approved a 5% depreciation rate for Account No.
7 380000 (Wastewater Treatment and Disposal Equipment). Further, the Company proposed
8 A 5% depreciation rate for Account No. 380000 in this case. Account No. 380625 is
9 designated for treatment disposal equipment used for general treatment purposes. Staff
10 believes that the life span for equipment in Account No. 380625 should be very similar, if
11 not the same, for equipment classified in Account No. 380000. National Association of
12 Regulatory Utility Commissioners ("NARUC") Account No. 380000 includes equipment
13 such as, aeration chambers, chemical equipment, trickling filters, landfill equipment,
14 sedimentation equipment, mechanical treatment equipment, and sludge digestion
15 equipment, that is similar in nature, use and expected life as the equipment in Account No.
16 380625. In its other Districts the Company included all of its equipment in question here in
17 Account No. 380000. Staff estimates the life span for mechanical treatment plant
18 equipment at 20 years (about 5% depreciation rate). Therefore, Staff adopted and
19 recommended the 5% depreciation rate for Account No. 380625.
20

21 **Depreciation Rates for Account No. 380650**

22 **Q. In Decision No. 70372, did the Commission approve any depreciation rates for**
23 **Account No. 380650 (Treatment Disposal Equipment – Influent Lift Station)?**

24 A. No. Account No. 380650 is a new proposed account in this rate application.

1 **Q. Did the Company provide any documentation to support its proposed 8.4%**
2 **depreciation rate for this account?**

3 A. No.
4

5 **Q. Please explain how Staff developed its recommended depreciation rate?**

6 A. Account No. 380650 is designated as capital improvement for treatment and disposal
7 equipment used for influent lift stations. Staff believes the life span for equipment
8 installed in influent lift stations should be similar to the lives for equipment installed for
9 grit removal and lives for equipment installed in receiving wells. Equipment used in an
10 influent lift station includes wells, screen units, and odor removal units. In Decision No.
11 70372, the Commission approved A 5% depreciation rate for screen unit (or grit removal
12 equipment, Account No. 380500), 5.42% for receiving wells (Account No. 370000) and
13 5% for odor removal unit (Wastewater Chemical Treatment Equipment, Account No.
14 380500). Staff estimates a life span of 20 years for both odor removal units and screen
15 units is reasonable. Staff estimates a 20 year life span for a concrete wet well and 30 year
16 life span for a fiber glass wet well. The Company proposed a 5% depreciation rate for
17 accounts (Account No. 380500, Account No. 370000, and Account No. 380500) in this
18 rate filing. Therefore, Staff adopted and recommended the 5% depreciation rate for
19 Account No. 380650.

Verrado Wastewater Treatment Plant

Q. The Company stated that installation of the second clarifier was to provide reliable wastewater treatment capacity when the first clarifier is down for maintenance or repairs. Do you agree that the Verrado Wastewater Treatment Plant ("Verrado") should have been equipped with a second clarifier?

A. No. There are no rules regarding how many clarifiers should be installed in a wastewater treatment plant, in fact, there is only one clarifier installed in the Company's Russell Ranch Wastewater Treatment Plant (in Agua Fria Wastewater District) and in the Wishing Well Wastewater Treatment Plant (in Mohave Wastewater District). Furthermore, the Anthem Wastewater Treatment Plant (in Anthem Wastewater Treatment District) is not equipped with a clarifier.

Q. When the clarifier is down, is the treatment capacity in Verrado reduced?

A. No. If the clarifier is down for a short period of time there should not be an impact on treatment capacity. Short periods of equipment down time are accommodated by the plants equalization basin.

Q. When the clarifier is down, will the effluent meet the permit discharge limit?

A. Yes, if the plant is operated properly.

III. SUN CITY WEST WASTEWATER DISTRICT

Depreciation Rates for Account No. 390000

Q. The Company's witness testified that Staff had changed the depreciation rate for Account No. 390000 (Office Furniture and Equipment) from 4.59% to 4.98%, do you agree?

A. No. The Company's proposed 4.59% depreciation rate for Account No. 390000 was accepted by Staff.

IV. Typographical Correction

Q. Please identify the one typographical corrections.

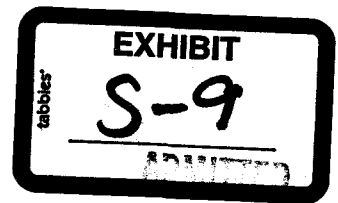
A. The depreciation rate for Account No. 334100 (meters) for Sun City Water District should have been 6.67% instead of 2.51%. A revised Depreciation Rates Table for Sun City Water District is attached as Figure 6.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

FIGURE 6
DEPRECIATION RATES FOR SUN CITY WATER DISTRICT (REVISED)

NARUC Acct #	Company's Account #.	Depreciable Plant	Decision # 70351	Rate (%) Sun City Water proposed	Staff Recommended Rate (%)
301	301000	Organization	0	0	0
302	302000	Franchises	0	0	0
303		Land & Land Rights	0		0
	303200	Land & Land Rights SS	0	0	0
	303300	Land & Land Rights P	0	0	0
	303500	Land & Land Right TD	0	0	0
	303600	Land & Land Right AG	0	0	0
304		Structures & Improvements			
	304100	Structure & Improvement SS	2.50	2.50	2.50
	304200	Structure & Improvement P	1.67	1.67	1.67
	304300	Structures and Improvements WT	1.67	1.67	1.67
	304400	Structure & Improvement TD	2.00	2.00	2.00
	304500	Structure & Improvement AG	N/A	3.99 ^{1,2}	3.99
	304600	Structure & Improvement office	4.63	4.63	4.63
	304620	Structure & Improvement Leasehold	N/A	N/A	0
	304800	Structure & Improvement Misc	1.67	1.67	1.67
305	305000	Collection & Impounding reservoirs	2.50	2.50	2.50
307	307000	Wells & Springs	2.52	2.52	2.52
309	309000	Supply Mains	N/A	2.00	2.00
310	310000	Power Generation Equip	4.42	4.42	4.42
	310100	Power Generation Equip Other	N/A	4.42	4.42
311		Pumping Equipment			
	311200	Pump Equipment Electric	4.42	4.42	4.42
	311300	Pump Equipment Diesel	5.00	5.00	5.00
	311400	Pump Equipment Hydraulic	N/A	4.42	4.42
	311500	Pump Equipment Other – pump parts ¹	5.01	5.01	5.01
320		Water Treatment			
	320100	Water Treatment Equipment Non-Media	4.00	7.06 ²	7.06
330		Distribution Reservoirs & Standpipes			
	33000	Distribution Reservoirs & Standpipes	1.67	1.67	1.67
331		Transmission and Distribution			
	331001	TD mains not classified by size	1.53	1.53	1.53
	331100	TD mains 4-inch & less	1.53	1.53	1.53
	331200	TD mains 6-inch to 8-inch	1.53	1.53	1.53
	331300	TD mains 10-inch to 16-inch	1.53	1.53	1.53
	331400	TD mains 18-inch & Grtr	N/A	2.00 ²	2.00
333	333000	Services	2.48	2.48	2.48
334		Meters			
	334100	Meters	2.51	6.67 ²	6.67 ⁵
	334200	Meter installations	2.51	2.51	2.51
335	335000	Hydrants	2.00	2.00	2.00
336	N/A	Backflow Prevention Devices	6.67	N/A	6.67
339		Other Plant & Misc Equipment			
	339100	Other P/E Intangible	0	0	0
	339500	Other P/E TD ³	2.00	20.00	0.00 ³



BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
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Commissioner
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SANDRA D. KENNEDY
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BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF) DOCKET NO. W-01303A-09-0343
ARIZONA-AMERICAN WATER COMPANY)
FOR DETERMINATION OF THE CURRENT)
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RATES AND CHARGES BASED THEREON)
FOR UTILITY SERVICE BY ITS ANTHEM/)
AGUA FRIA WASTEWATER DISTRICT,)
ITS SUN CITY WASTEWATER DISTRICT, AND)
ITS SUN CITY WEST WASTEWATER DISTRICT)

DIRECT
TESTIMONY
OF
GERALD BECKER
PUBLIC UTILITIES ANALYST V
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

MARCH 8, 2010

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EXECUTIVE SUMMARY
ARIZONA-AMERICAN WATER COMPANY
DOCKET NOS. W-01303A-09-0343 AND SW-01303A-09-0343

Arizona-American Water Company ("AAWC" or "Company") is a certificated Arizona public service corporation that provides water and wastewater utility service in various communities throughout the state. This case includes the districts of Anthem Water Anthem/Agua Fria Wastewater, Sun City Water, Sun City Wastewater and Sun City West Wastewater.

On July 2, 2009, AAWC filed an application for a permanent rate increase based upon a test year ending December 31, 2008. The total Company-requested revenue increase for all five systems is \$20,628,634. The testimony of Mr. Gerald W. Becker herein is for two of the five systems—the Anthem Water District and the Sun City Water District. Staff witness Gary McMurray is providing the testimony for the Anthem/Agua Fria Wastewater District, the Sun City Wastewater District, and the Sun City West Wastewater District.

Anthem Water District:

The Company proposes a revenue increase of \$7,268,172 or 97.1 percent, from \$7,483,274 to \$14,751,446 for the Anthem Water District. The proposed revenue increase would produce an operating income of \$4,898,781 for an 8.53 percent rate of return on an original cost rate base ("OCRB") of \$57,430,024. Staff's revenue requirement of \$13,421,942 represents an increase of \$5,938,668, or 79.36 percent, for a 7.20 percent rate of return on a Staff-adjusted OCRB of \$57,368,047. The Company proposes to use OCRB as its Fair Value Rate Base.

Sun City Water District:

The Company proposes a revenue increase of \$2,531,130 or 27.27 percent, from \$9,283,101 to \$11,814,231 for the Sun City Water District. The proposed revenue increase would produce an operating income of \$2,404,271 for an 8.53 percent rate of return on an OCRB of \$28,186,062. Staff's revenue requirement of \$11,293,188 represents an increase of \$2,010,087, or 21.65 percent, for a 7.20 percent rate of return on a Staff-adjusted OCRB of \$27,953,979. The Company proposes to use OCRB as its Fair Value Rate Base.

1 **INTRODUCTION**

2 **Q. Please state your name, occupation, and business address.**

3 A. My name is Gerald Becker. I am a Public Utilities Analyst V employed by the Arizona
4 Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff").
5 My business address is 1200 West Washington Street, Phoenix, Arizona 85007.
6

7 **Q. Briefly describe your responsibilities as a Public Utilities Analyst V.**

8 A. I am responsible for the examination and verification of financial and statistical
9 information included in utility rate applications. In addition, I develop revenue
10 requirements, and prepare written reports, testimonies, and schedules that include Staff
11 recommendations to the Commission. I am also responsible for testifying at formal
12 hearings on these matters.
13

14 **Q. Please describe your educational background and professional experience.**

15 A. I received a Masters of Business Administration with an emphasis in Accounting from
16 Pace University. I am a Certified Public Accountant and a Certified Internal Auditor.
17

18 I have participated in multiple rate, financing and other regulatory proceedings. I attended
19 the National Association of Regulatory Utility Commissioners ("NARUC") Utilities Rate
20 School.
21

22 I began employment with the Commission as a utilities regulatory analyst in April 2006.
23 Prior to joining the Commission, I worked as an Auditor at the Department of Economic
24 Security and Department of Revenue in the Taxpayer Assistance Section. Prior to those
25 jobs, I worked for 15 years as an Auditor, Analyst, Financial Analyst, and Budget
26 Manager at United Illuminating, an investor-owned electric company in New Haven, CT.

1 **Q. What is the scope of your testimony in this case?**

2 A. I am presenting Staff's analysis and recommendations in the areas of rate base, operating
3 revenues and expenses, and revenue requirement, regarding the Anthem Water District
4 and Sun City Water District included in the application of Arizona-American Water
5 Company ("AAWC" or "Company") for a permanent rate increase. Staff witness Gary
6 McMurry is presenting Staff's analysis and recommendations in the areas of rate base,
7 operating revenues and expenses, and revenue requirement, regarding the Anthem/Agua
8 Fria Wastewater District, the Sun City Wastewater District, and the Sun City West
9 Wastewater District. Staff witness Juan Manrique is presenting Staff's cost of capital
10 recommendations. Staff witness Jeff Michlik is presenting rate design recommendations.
11 Staff witness Dorothy Hains is presenting Staff's engineering analysis and
12 recommendations.

13
14 **Q. What is the basis of your recommendations?**

15 A. I performed a regulatory audit of the Anthem Water District and Sun City Water District
16 included in AAWC's application to determine whether sufficient, relevant, and reliable
17 evidence exists to support the Company's requested rate increases. The regulatory audit
18 consisted of examining and testing the financial information, accounting records, and
19 other supporting documentation and verifying that the accounting principles applied were
20 in accordance with the Commission-adopted NARUC Uniform System of Accounts
21 ("USOA").

1 **BACKGROUND**

2 **Q. Please describe the Company's operations.**

3 A. American Water Works Company, Inc. ("AWW") is a holding company whose major
4 subsidiaries provide water and wastewater services in 20 states. AWW is the largest
5 investor-owned water and wastewater company in the United States. It is also Arizona's
6 largest investor-owned water and wastewater utility, serving approximately 100,000 water
7 customers and 50,000 wastewater customers in the state.

8
9 AWW has undertaken several ownership changes over the past several years. Until 2003,
10 AWW was a publicly-traded company headquartered in Voorhees, N.J. In 2003, AWW's
11 stock was acquired by RWE Aktiengesellschaft ("RWE") (a German company) and
12 became a wholly-owned subsidiary of RWE. In 2005, RWE announced its intention to
13 exit from its water activities in the U.S. and elsewhere and, in connection with this, sold
14 approximately 63.2 million shares in an initial public offering of AWW's shares. This
15 sale amounted to approximately 40 percent of AWW's shares now being owned by the
16 investing public and the remaining 60 percent still owned by RWE. During the 4th
17 quarter of 2009, RWE fully divested its remaining ownership of AWW through the
18 consummation of additional public offerings and all associated board members have
19 resigned from the Board of Directors. AWW is listed on the New York stock exchange as
20 AWK.

21
22 As noted above, AWW owns a number of water and wastewater subsidiaries that operate
23 in 32 states throughout the U.S. One of these is AAWC. AWW also owns non-regulated
24 subsidiaries. AWW raises debt capital for its subsidiaries through its financing subsidiary
25 American Water Capital Corp.

1 The application is for two water systems and three wastewater systems owned by AAWC.
2 Those systems include Anthem Water, Sun City Water, Anthem/Agua Fria Wastewater,
3 Sun City Wastewater and Sun City West Wastewater.
4

5 My testimony addresses the Anthem Water District's and the Sun City Water District's
6 rate increase requests. The Anthem Water District serves approximately 8,700 customers
7 and provides water utility service to the Anthem community. The Sun City Water District
8 is the Company's second largest water district serving over 23,000 customers. It covers
9 roughly 18 square miles and includes all of Sun City and the Town of Youngtown, as well
10 as small sections of Peoria and Surprise.
11

12 **Q. What are the primary reasons for the Company's requested permanent rate**
13 **increase?**

14 A. The Company's application states that it has lost over \$31 million since AWW purchased
15 the assets of Citizens Water Resources in 2002 and that it lost \$1.8 million in 2008 and
16 \$4.6 million in 2007. The Company further states that its times interest earned ratio
17 ("TIER") was 0.44 at the end of 2006 and 0.52 at the end of 2008. The Company states
18 that a TIER of less than 1.0 is not sustainable in the long term.
19

20 **CONSUMER SERVICE**

21 **Q. Please provide a brief history of customer complaints received by the Commission**
22 **regarding AAWC.**

23 A. Staff reviewed the Commission's records for the period January 1, 2007, through February
24 9, 2010, and found:
25

For Anthem Water District, there were 14 complaints and 71 opinions, all opposed to the rate increase.

For the Sun City Water and Wastewater Districts, there were 36 complaints and 126 opinions, all opposed to the rate increase. The Sun City Water and Wastewater Districts complaints and opinions are combined because most were not clear regarding which of the two systems was being referenced.

Of the complaints received for all systems in this docket, eleven have not been resolved.

SUMMARY OF PROPOSED REVENUES

Q. Please summarize the Company's filing for the Anthem Water District and the Sun City Water District.

A. The Company proposal for each system is shown below.

<u>System</u>	<u>Test Year Revenue</u>	<u>Company Proposed</u>	<u>\$ Increase</u>	<u>% Increase</u>
Anthem Water	\$ 7,483,274	\$ 14,751,446	\$ 7,268,172	97.13%
Sun City West Water	\$ 9,283,101	\$ 11,814,231	\$ 2,531,130	27.27%
Overall	\$ 16,766,375	\$ 26,565,677	\$ 11,557,879	68.93%

Q. Please summarize Staff's recommended revenue.

A. Staff's recommendation for each system is shown below.

<u>System</u>	<u>Test Year Revenue</u>	<u>Staff-Recommended</u>	<u>\$ Increase</u>	<u>% Increase</u>
Anthem Water	\$ 7,483,274	\$ 13,421,942	\$ 5,938,668	79.36%
Sun City West Water	\$ 9,283,101	\$ 11,293,188	\$ 2,010,087	21.65%
Overall	\$ 16,766,375	\$ 24,715,130	\$ 7,948,755	47.41%

1 **Q. Please compare Staff's recommended revenue requirement with the Company's**
2 **proposal.**

3 A. Below is a comparison of Staff's recommended and the Company's proposed revenue
4 requirements:
5

<u>System</u>	<u>Company-Proposed</u>	<u>Staff-Recommended</u>	<u>\$ Difference</u>	<u>% Difference</u>
Anthem Water	\$ 14,751,446	\$ 13,421,942	(\$1,329,523)	(9.01%)
Sun City West Water	\$ 11,814,231	\$ 11,293,188	(\$521,043)	(4.41%)

6
7 *Anthem Water District:*

8 For the Anthem Water District, the Company proposes a revenue increase of \$7,268,172,
9 or 97.13 percent, from \$7,483,274 to \$14,751,446. The proposed revenue increase would
10 produce an operating income of \$4,898,781 for an 8.53 percent rate of return on an
11 original cost rate base ("OCRB") of \$57,430,024. Staff's revenue requirement of
12 \$13,421,942 represents an increase of \$5,938,668, or 79.36 percent, for a 7.20 percent rate
13 of return on a Staff-adjusted OCRB of \$57,368,047.
14

15 *Sun City Water District:*

16 For Sun City Water, the Company proposes a revenue increase of \$2,531,130, or 27.27
17 percent, from \$9,283,101 to \$11,814,231. The proposed revenue increase would produce
18 an operating income of \$2,404,271 for an 8.53 percent rate of return on an OCRB of
19 \$28,186,062. Staff's revenue requirement of \$11,293,188 represents an increase of
20 \$2,010,087, or 21.65 percent, for a 7.20 percent rate of return on a Staff adjusted OCRB of
21 \$27,953,979.
22

23 **Q. What Test Year did the Company utilize for this filing?**

24 A. AAWC's rate filing is based on the twelve months ended December 31, 2008 ("test
25 year").

1 **Q. Please summarize the rate base and operating income recommendations and**
2 **adjustments addressed in your testimony for AAWC.**

3 **A. A summary of my testimony on rate base and operating income for both Water District**
4 **follows:**

5
6 **Anthem Water District – Staff-Recommended Rate Base Adjustments:**

7 **Plant in Service** – This adjustment reclassifies \$22,289 of plant between two accounts.

8 **Working Capital** – This adjustment decreases the cash working capital component of
9 Working Capital by \$13,125.

10 **Accumulated Deferred Income Taxes** – This adjustment decreases the accumulated
11 deferred income tax debit by \$18,580 to reflect an amount consistent with that shown in
12 the Company's audited financial statements.

13 **Contributions in Aid of Construction ("CIAC") associated with Construction Work**
14 **in Progress ("CWIP")** – This adjustment increases CIAC by \$30,271 by reversing the
15 Company's pro forma entry to remove CIAC associated with CWIP.

16
17 **Anthem Water District – Staff-Recommended Operating Income Adjustments:**

18 **Fuel and Power Expense** – This adjustment increases Fuel and Power Expense by
19 \$83,883 to reflect the Company's updated calculation of power costs associated with the
20 recently approved increases to APS' rates and to correct some computational errors in the
21 Company's original filing.

22 **Customer Accounting Expense** – This adjustment decreases Customer Accounting
23 Expense by \$33,363 to reflect Staff's recalculation of the Bad Debt Expense that is
24 included in the Customer Accounting Expense.

1 **Depreciation Expense** – This adjustment decreases Depreciation Expense by \$94,116 to
2 reflect application of Staff's recommended depreciation rates to Staff's recommended
3 plant balances in this proceeding.

4 **Income Tax Expense** – This adjustment increases income taxes by \$22,370 to reflect the
5 application of statutory State and Federal income tax rates to Staff's test year taxable
6 income.

7 **Rate Case Expense** – This adjustment decreases Rate Case Expense by \$12,500 to reflect
8 Staff's removal of rate case expense associated with prior proceedings.

9
10 **Sun City Water District – Staff-Recommended Rate Base Adjustments:**

11 **Plant in Service and Accumulated Depreciation** – This adjustment decreases Plant in
12 Service and Accumulated Depreciation by \$149,497 and \$22,008, respectively, for
13 "Youngtown Plant" that the Company could not support.

14 **Working Capital** – This adjustment decreases the cash working capital component of
15 Working Capital by \$16,452.

16 **Accumulated Deferred Income Taxes** – This adjustment decreases the accumulated
17 deferred income tax debit by \$49,151 to reflect an amount consistent with that shown in
18 the Company's audited financial statements.

19 **CIAC associated with CWIP** – This adjustment increases CIAC by \$38,991 by reversing
20 the Company's pro forma entry to remove CIAC associated with CWIP.

21
22 **Sun City Water District – Staff-Recommended Operating Income Adjustments:**

23 **Fuel and Power Expense** – Two adjustments increase Fuel and Power Expense by a net
24 amount of \$228,562. The first adjustment is a \$248,073 increase to reflect the Company's
25 updated calculation of power costs reflecting the recently approved increases to APS'

1 rates and to correct some computational errors in the Company's original filing. The
2 second adjustment removes \$19,511 due to non-account water in excess of 10 percent.

3 **Chemicals Expense** – This adjustment decreases Chemicals Expense by \$367 to reflect
4 Staff-recommended disallowance due to non-account water in excess of 10 percent.

5 **Customer Accounting Expense** – This adjustment decreases Customer Accounting
6 Expense by \$83,158 to reflect Staff recalculation of the Bad Debt Expense that is included
7 in the Customer Accounting Expense.

8 **Miscellaneous Expense** – This adjustment decreases Miscellaneous Expense by \$8,386 to
9 reflect Staff's recalculation of the Water Testing Expense that is included in
10 Miscellaneous Expense.

11 **Depreciation Expense** – This adjustment decreases Depreciation Expense by \$8,167 to
12 reflect Staff's recommended plant balances and depreciation rates recommended in this
13 proceeding.

14 **Income Tax Expense** – This adjustment decreases income taxes by \$42,082 to reflect the
15 application of statutory State and Federal income tax rates to Staff's test year taxable
16 income.

17 **Rate Case Expense** – This adjustment decreases Rate Case Expense by \$12,500 to reflect
18 Staff's removal of rate case expense associated with prior proceedings.

19
20 **RATE BASE**

21 **Q. Did the Company prepare a schedule showing the elements of Reconstruction Cost**
22 **New Rate Base?**

23 **A.** No, the Company did not. The Company requested that its OCRB be treated as its fair
24 value rate base.

ANTHEM WATER – RATE BASE ADJUSTMENTS

Q. Is Staff proposing any adjustments to rate base in this system?

A. Yes.

Q. Please summarize Staff's adjustments to Anthem Water's rate base shown on Schedules GWB-3, GWB-4, GWB-5, and GWB-7.

A. Staff's adjustments to the Company's rate base resulted in a net decrease of \$61,977, from \$57,430,024 to \$57,368,047. This decrease was due to recalculating cash working capital, recalculating accumulated deferred income taxes, and including the CIAC associated with CWIP.

Rate Base Adjustment No. 1 – Plant in Service

Q. What did the Company propose for Plant in Service for Accounts 304300 Structures and Improvements, Water Treatment, and Account 320100, Water Treatment Equipment Non-media?

A. The Company proposes balances of \$1,058,498 and \$10,952,910 for accounts 304300 and 320100, respectively.

Q. What is the nature of Staff's adjustments to these plant accounts?

A. During its engineering review, Staff determined that \$22,289 should be reclassified from account 304300 to account 320100.

Q. What does Staff recommend?

A. Staff recommends the transfer of \$22,289 from account 304300 to 320100, as shown in Schedules GWB-4 and GWB-5.

Rate Base Adjustment No. 2 – Working Capital

Q. Please describe the working capital adjustment to rate base.

A. Working capital is a collective term that typically includes amounts for prepaid expenses, materials and supplies inventory, and cash working capital. Staff Schedule GTM-3 shows the composition of the Company's working capital by component and Schedules GWB-6 and GWB-7 provide the calculations of the Company's proposed cash working capital and Staff's recommended adjustments to the cash working capital. Staff's adjustments relate to the cash working capital component only.

The purpose of calculating cash working capital is to quantify the amount of cash that a company needs to operate by analyzing the timing differentials between the period required for revenues to be realized and collected and the periods between the date that an expense is incurred and the date paid. A lead lag study summarizes the differences between the collection of revenues and the payment of expenses and creates a cash working capital amount which is added to or subtracted from the Company's rate base.

Q. Did the Company perform a lead lag study and a computation of cash working capital in this case?

A. Yes. The Company's information supporting its cash working capital component and the Company's calculation thereof are shown in Schedule GWB-6.

Q. Was Staff able to use the Company's study to calculate cash working capital?

A. Yes.

1 **Q. Does Staff agree with the results of the Company's lead lag study?**

2 A. With one exception, Staff agrees with the number of days proposed by the Company for
3 its lead lag computation.

4
5 **Q. Please explain.**

6 A. Staff does not agree with the Company's calculation of lead days for its Customer
7 Accounting Expense group. In this group, the Company incorrectly includes Bad Debt
8 Expense. By including Bad Debt Expense in this line item calculation, the Company's
9 lead lag days is reduced from 20.31 days to 10.09 days. This reduction increases the
10 estimate of cash working capital needed by the Company.

11
12 **Q. What does Staff recommend for the treatment of Bad Debt Expense?**

13 A. Staff recommends that Bad Debt Expense not be considered in the lead lag computation
14 since bad debts have no associated cash outlay and, therefore, have no corresponding
15 expense lag days. After excluding bad debt expense, the resulting expense lag-days for
16 Customer Accounting should be 20.31 days.

17
18 **Q. Does Staff have other concerns with the computation of cash working capital?**

19 A. Yes.

20
21 **Q. Please explain.**

22 A. In addition to the number of lead lag days assigned to each line item, the computation of
23 cash working capital must reflect the adjusted value of expenses to which the lead lag days
24 are applied. Accordingly, Staff's calculation reflects Staff's adjusted test year expenses as
25 reflected in Schedule GWB-11, adjusted for the removal of Chemical Expense (dollars)
26 and Bad Debt Expense (dollars) included in Customer Accounting Expense.

1 **Q. Please explain the reasons to remove Chemical Expenses from the computation of**
2 **cash working capital.**

3 A. For all systems in this docket, the amounts recorded as Chemical Expenses do not
4 constitute a direct cash expense. Instead, Chemical Expenses, as recorded by the
5 Company, represent issuances from the Company's materials and supplies inventory
6 which is already included in rate base as a separate component of the collective Working
7 Capital calculation. Hence, the inclusion of amounts recorded as Chemical Expenses in
8 the computation of the cash working capital component of the collective Working Capital
9 computation would result in the double counting of this item in rate base.

10

11 **Q. Please explain the reasons to remove Bad Debt Expense from the Customer**
12 **Accounting Expense in the cash working capital computation.**

13 A. Bad Debt expense does not represent a cash outlay like that experienced with other cash
14 expenses; rather, Bad Debt expense represents amounts not collected. The provision for
15 bad debt expense is included in rates and is collected on a timely basis from the paying
16 customers. For these reasons, Staff recommends that Bad Debt Expense not be considered
17 in the computation of cash working capital.

18

19 **Q. Was Staff able to produce its own estimates of cash working capital for this system?**

20 A. Yes. As indicated in Schedule GWB-7, Staff recomputed the cash working capital for the
21 Anthem Water District and provides a comparison of the Staff-recommended total with
22 the Company's proposal.

23

24 **Q. What does Staff recommend?**

25 A. Staff recommends approval of the recalculated cash working capital amounts as shown for
26 the Anthem Water District in Schedules GWB-4 and GWB 7.

Rate Base Adjustment No. 3 – Accumulated Deferred Income Taxes

Q. What did the Company include in accumulated deferred income taxes?

A. The Company proposes to allocate the total accumulated deferred income taxes for AAWC to each of its systems based on its four factor allocation.

Q. How did Staff evaluate these items?

A. Staff reviewed the calculation of accumulated deferred income taxes by attempting to agree the total amount subject to allocation to the amount reflected in the Company's audited financial statements.

Q. Was Staff able to reconcile the two amounts?

A. No. Staff noted that the total used by the Company to calculate its allocations was based on approximately \$13.026 million, while the accumulated deferred income tax receivable in the Company's audited financials was \$12.689 million, a difference of approximately \$336,000.

Q. What does Staff recommend?

A. Staff recommends that the accumulated deferred income taxes be recalculated based on the total amount reflected in the Company's audited financials. This calculation is shown in Schedule GWB-8.

Rate Base Adjustment No. 4 – CIAC Associated with CWIP

Q. Please describe how CIAC (and AIAC) relate to plant in service and rate base.

A. CIAC and AIAC represent funds or plant provided to the Company by parties other than investors. Typically, funds received as CIAC or AIAC are used to build plant which may ultimately be in rate base. Plant that is used and useful for the provision of utility service

1 is a component of rate base. CIAC and AIAC are also components of rate base. As
2 components of rate base, plant in service differs from CIAC and AIAC in that plant
3 increases rate base and CIAC and AIAC decrease rate base. Plant that is under
4 construction (CWIP) is normally not a component of the rate base calculation. Thus,
5 funds or plant received as CIAC or AIAC that are funding CWIP are included in the rate
6 base calculation while the CWIP is not included in the rate base calculation. As a result,
7 the plant funded by CIAC or AIAC that is included in the rate base calculation may or
8 may not equal the CIAC and AIAC that has been received and is reflected in the rate base
9 calculation.

10
11 **Q. Please describe the Company's position.**

12 A. The Company asserts that it has received CIAC related to plant that is not yet completed
13 (i.e., CWIP) and so not reflected in its rate base. The Company further states that since
14 CWIP is not an addition to rate base, the related CIAC should not be a reduction in the
15 rate base calculation.

16
17 **Q. Is the Company's position a departure from traditional ratemaking practices?**

18 A. Yes. The Company's position is a departure from traditional ratemaking practices.
19

20 **Q. Please explain.**

21 A. According to the NARUC USOA account no. 271, CIAC includes:

22
23 *Any amount or item of money, services or property received by a utility[,] . . .*
24 *any portion of which is provided at no cost to the utility, which represents an*
25 *addition or transfer to the capital of the utility, and which is utilized to offset*
26 *the acquisition, improvement or construction costs of the utility's property,*
27 *facilities or equipment used to provide utility services to the public.*
28 *(Emphasis added).*
29

1 The Company has use of the funds or plant advanced or contributed by others, thereby
2 offsetting the need for investors to commit funds for utility facilities or equipment.

3
4 Further, the NARUC Rate Case and Audit Manual¹ instructs that the impact of such
5 contributions for ratemaking is to “reduce the rate base as a source of non-investor
6 supplied capital.” Accordingly, the Company’s rate base should be reduced by the amount
7 of CIAC.

8
9 **Q. Did the Company request similar treatment of CIAC associated with CWIP in its last**
10 **rate filing?**

11 A. Yes. In the Company’s last rate case, Decision No. 71410, the Commission rejected the
12 Company’s proposed treatment.

13
14 **Q. What does Staff recommend?**

15 A. Staff recommends that the CIAC the Company asserts is associated with CWIP be
16 reflected in the CIAC balances used to calculate and properly reflect a reduction to rate
17 base. For the Anthem Water District, a \$30,271 adjustment to increase CIAC is
18 appropriate.

19
20 **ANTHEM WATER - OPERATING INCOME ADJUSTMENTS**

21 **Q. Is staff recommending any adjustments to operating income in this case?**

22 A. Yes. Staff is recommending the following adjustments.

¹ Rate Case and Audit Manual Prepared by NARUC Staff Subcommittee on Accounting and Finance (2003), p.22,
available at http://www.naruc.org/Publications/ratecase_manual.pdf.

Anthem Water Operating Income Adjustment No.1 – Fuel and Power Expense

Q. What is the Company proposing for Fuel and Power Expense?

A. For the test year, the Company proposes \$1,259,637 for Fuel and Power Expense. The amount proposed reflects an APS interim rate increase but not the increase ultimately approved by the Commission.

Q. Does Staff agree with the Company's proposed amount?

A. No. The Company provided updated schedules to reflect the increase ultimately approved in the recent APS rate case. The updated spreadsheet indicates that the Fuel and Power Expense is expected to increase by \$83,883 to \$1,343,521.

Q. What is Staff's recommendation for Fuel and Power Expense?

A. Staff recommends an increase to Fuel and Power Expense of \$83,883 from \$1,259,637 to \$1,343,521 as shown in Schedule GWB-12.

Anthem Water Operating Income Adjustment No. 2 – Customer Accounting Expense

Q. What is the Company proposing for Customer Accounting Expense?

A. AAWC is proposing the test year recorded amount and pro forma amounts to reflect customer annualization and increased postage expense for a total of \$183,101. This amount includes \$67,224 for Bad Debt Expense.

Q. Does Staff agree with the Company's proposed amount?

A. No. The Company provided a spreadsheet detailing its three-year experience for Bad Debt Expense. In this schedule, the Company indicates that Bad Debt Expense is 0.45 percent of revenues. Staff recalculated Bad Debt Expense based on Staff's recommended

1 test year revenues of \$7,483,274 and determined the Bad Debt Expense to be \$33,861, or a
2 difference of \$33,363.
3

4 **Q. What is Staff recommending for Customer Accounting Expense?**

5 A. Staff is proposing a decrease to Customer Accounting Expense of \$33,363, from \$183,101
6 to \$149,738, to remove the excess Bad Debt Expense, as shown in Schedules GWB-11
7 and GWB-13.
8

9 **Anthem Water Operating Income Adjustment No. 3 – Depreciation Expense**

10 **Q. What amount of depreciation expense is the Company proposing?**

11 A. AAWC is proposing depreciation expense of \$2,399,893.
12

13 **Q. What are the components of the Company's proposed depreciation expense?**

14 A. The Company-proposed depreciation expense consists of test year depreciation expense
15 plus pro forma adjustments to recognize depreciation on post test year plant additions and
16 the amortization of CIAC.
17

18 **Q. How did AAWC calculate each component of its proposed depreciation expense for**
19 **each of the five systems?**

20 A. The Company calculated test year depreciation expense by multiplying the original cost of
21 its depreciable test year plant in service by the depreciation rates approved in the prior rate
22 proceedings.
23

24 **Q. Did Staff recompute the Company's depreciation expense?**

25 A. Yes. Staff recomputed depreciation expense based on Staff's recommended total plant in
26 service and the depreciation rates recommended in this proceeding. Staff uses the same

1 methodology as the Company to calculate depreciation expense. Staff's calculation
2 differs from the Company's due primarily to the use of Staff's recommended depreciation
3 rates in this proceeding. Staff and the Company reduced depreciation expense for the
4 amortization of CIAC in accordance with the NARUC USOA.

5
6 **Q. What is Staff's recommendation?**

7 A. Staff recommends a decrease in depreciation expense of \$94,116 from \$2,399,893 to
8 \$2,305,776.

9
10 **Anthem Water Operating Income Adjustment No. 4 – Income Taxes**

11 **Q. What is the Company proposing for test year Income Tax Expense?**

12 A. The Company is proposing a negative \$759,675 for test year Income Tax Expense.

13
14 **Q. How did Staff calculate test year income tax expense?**

15 A. Staff calculated test year income tax expense by applying the statutory State and Federal
16 income tax rates to Staff's adjusted test year taxable income as shown on Schedule
17 GWB-2. Since the Company files a consolidated tax return with other systems and the
18 average and marginal tax rates are 34 percent when federal taxable income is over
19 \$335,000, Staff has assigned a 34 percent federal tax rate to the test year income.

20
21 **Q. Did Staff prepare a schedule showing the computation of test year income taxes?**

22 A. Yes. Staff's computation of income taxes is shown in Schedule GWB-2.

23
24 **Q. Did Staff make any adjustments to test year Income Tax Expense?**

25 A. Yes. Staff's adjustment reflects Staff's calculation of the income tax expense based upon
26 Staff's adjusted test year taxable income, as shown in Schedule GWB-2.

1 **Q. What is Staff's recommendation?**

2 A. Staff recommends increasing test year Income Tax Expense by \$22,370, from negative
3 \$759,675 to negative \$737,305, as shown in Schedules GWB-11 and GWB-2.
4

5 **Anthem Water Operating Income Adjustment No. 5 – Rate Case Expense**

6 **Q. What did the Company include in rate case expense?**

7 A. In its calculation of rate case expense, the Company included \$12,500 for its "Expected
8 Unamortized Balance as of 9/2010" of \$37,500 to be recovered over three years, along
9 with the estimated rate case expense of the instant proceeding.
10

11 **Q. Please explain Staff's position.**

12 A. Consistent with past recommendations adopted by the Commission, Staff recommends
13 exclusion of unrecovered rate case expense related to prior proceedings. Staff's
14 recommendation reflects "normalization" as opposed to "amortization" of rate case
15 expense.
16

17 **Q. Please explain the technical distinction between normalization and amortization.**

18 A. Normalization represents the anticipated average annual expense and the amount included
19 in test year expenses. The normalized level of expense is then updated in subsequent
20 proceedings and included as test year expense in the future proceeding with no
21 consideration of unrecovered amounts associated with activity in the prior case. In
22 contrast, amortization relates to the systematic recovery of an asset, or in the case of
23 CIAC, amortization is the systematic disposition of the cost-free funds or property
24 received. In accounting terms, assets and CIAC are balance sheet, or permanent, accounts
25 with balances that carry over from prior years; therefore, unamortized asset and CIAC
26 balances are eligible for consideration in future rates. In contrast, normalized expenses are

1 operating income, or temporary, accounts which are closed out each year and not eligible
2 for consideration in future rates.

3
4 **Q. What does Staff recommend?**

5 A. As shown in Schedule GWB-16, Staff recommends a decrease in Rate Case Expense of
6 \$12,500 from \$64,489 to \$51,989 for the amount that the Company proposes to include
7 from prior proceedings.

8
9 **Anthem Water – Property Taxes**

10 **Q. What is the Company proposing for Test Year Property Tax Expense?**

11 A. In its revised calculation, the Company is proposing \$292,953 for Test Year property tax
12 expense. The Company's proposed property tax expense is calculated on the modified
13 Arizona Department of Revenue ("ADOR") methodology typically adopted by the
14 Commission for water and wastewater utilities. The results from using this methodology
15 are primarily dependent upon the test year and proposed revenues. In other words, each
16 revenue requirement has its own property tax expense in the same manner as each
17 operating income has its own income tax expenses. Although the results for this
18 methodology are frequently referred to as Test Year amounts, in fact, the results are
19 representative of the average expected property tax over a subsequent three-year period
20 based partially on proposed revenues. The Company's calculation of proposed property
21 taxes is representative only of the Company's proposed revenues. Therefore, if the
22 Commission were to adopt any revenue requirement other than that proposed by the
23 Company, the Company's proposed property tax would not correspond with the adopted
24 revenues.

1 **Q. Has Staff developed a solution to address the dependent relationship between**
2 **Property Tax Expense and revenues?**

3 A. Yes. Staff has included a factor for property taxes in the Gross Revenue Conversion
4 Factor ("GRCF") (see Schedule GWB-2) that automatically adjusts the revenue
5 requirement for changes in revenue in the same way that income taxes are adjusted for
6 changes in operating income. This flexible method will accurately reflect Property Tax
7 Expense at any authorized revenue level. This refinement removes the need to include
8 proposed revenues in the calculation of Test Year Property Tax Expense and allows for
9 accurate calculation of Property Tax Expense at the Test Year revenue level.

10

11 **Q. What did Staff calculate for Test Year Property Tax Expense?**

12 A. Staff calculated \$292,953 for Test Year Property Tax Expense, as shown in Schedule
13 GWB-17.²

14

15 **Q. What is Staff recommending?**

16 A. Staff recommends adopting the Company's Test Year Property Tax Expense of \$292,953,
17 as shown in Schedule GWB-17. Staff further recommends adoption of its GRCF that
18 includes a factor for Property Tax Expense, as shown in Schedule GWB-2.

19

20 **SUN CITY WATER - RATE BASE ADJUSTMENTS**

21 **Q. Is Staff proposing any adjustments to rate base in this system?**

22 A. Yes.

² Schedule GWB-17 also shows calculations for Property Tax Expense of \$375,727 for Staff's recommended revenue.

1 **Q. Please summarize Staff's adjustments to Sun City Water's rate base shown on**
2 **Schedules GWB-3 through GWB-9.**

3 A. Staff's adjustments to the Sun City Water's rate base resulted in a net decrease of
4 \$232,083 from \$28,186,062 to \$27,953,979. This decrease was primarily due to removing
5 unidentified plant, recalculating cash working capital, recalculating accumulated deferred
6 income taxes, and including CIAC associated with CWIP.

7
8 **Rate Base Adjustment No. 1 – Plant in Service and Accumulated Depreciation**

9 **Q. What did the Company propose for Plant in Service and Accumulated Depreciation?**

10 A. The Company proposes Plant in Service and Accumulated Depreciation balances of
11 \$63,616,417 and \$18,973,897, respectively.

12
13 **Q. What is the nature of Staff's adjustments to Plant and Accumulated Depreciation?**

14 A. In reviewing the Company's supporting documentation, Staff noted reconciling items in
15 the Company's work papers for "Youngtown Plant" of \$127,489. Staff asked the
16 Company to explain this item and the Company stated that it was a reconciling item
17 between the Company's books and the plant balances included in the rate base approved
18 in the previous rate case. Company personnel investigated this item further but were not
19 able to demonstrate its retirement from its plant records or to provide explanation to
20 support its inclusion in rate base in this proceeding.

21
22 **Q. Did Staff explore this item further?**

23 A. Yes. Staff reviewed previous rate proceedings³ and determined that the net plant amount
24 of \$127,489 is comprised of Plant in Service of \$149,497 and Accumulated Depreciation

³ See Docket No. WS-01303A02-0867, Surrebuttal Testimony of Darron Carlson, October 31, 2003. See Schedule DWC-4, page 167 of 218 of filing.

1 of \$22,008. Because the Company cannot provide documentation to support the inclusion
2 of this plant in rate base, Staff concludes that it should be removed.
3

4 **Q. What is Staff recommending for the “Youngtown Plant”?**

5 A. Staff recommends decreases to Plant in Service and Accumulated Depreciation of
6 \$147,497 and \$22,008, respectively, as shown in Schedules GWB-4 and GWB-5.
7

8 **Rate Base Adjustment No.2 – Accumulated Deferred Income Taxes**

9 **Q. What did the Company include in accumulated deferred income taxes?**

10 A. The Company proposes to allocate the total accumulated deferred income taxes for
11 AAWC to each of its systems based on its four-factor allocation.
12

13 **Q. How did Staff evaluate these items?**

14 A. Staff reviewed the calculation of accumulated deferred income taxes by attempting to
15 agree the total amount subject to allocation to the amount reflected in the audited financial
16 statements of the AAWC.
17

18 **Q. Was Staff able to successfully reconcile the two amounts?**

19 A. No. Staff noted that the total used by the Company to calculate its allocations was based
20 on approximately \$13.026 million, while the accumulated deferred tax receivable in the
21 Company’s audited financials was \$12.689 million, a difference of approximately
22 \$336,000.

1 **Q. What does Staff recommend?**

2 A. Staff recommends that the accumulated deferred taxes be recalculated based on the total
3 amount reflected in the Company's audited financials. This calculation is shown in
4 Schedules GWB-6.

5
6 **Rate Base Adjustment No. 3 – Working Capital**

7 **Q. Please describe the working capital adjustment to rate base.**

8 A. Working capital is a collective term that typically includes amounts for prepaid expenses,
9 materials and supplies inventory, and cash working capital. In its summary schedules
10 filed in Docket, the Company aggregated these items as one line item. Staff Schedule
11 GWB-3 shows the composition of the Company's working capital by component and
12 Schedules GWB-7 and GWB-8 provide the calculations of the Company's proposed cash
13 working capital and show Staff's recommended adjustments to the cash working capital
14 Staff's adjustments relate to the cash working capital component only.

15
16 The purpose of calculating cash working capital is to quantify the amount of cash that a
17 company needs to operate by analyzing the timing differentials between the period
18 required for revenues to be realized and collected and the periods between the date that an
19 expense is incurred and the date paid. A lead lag study summarizes the differences
20 between the collection of revenues and the payment of expenses and creates a cash
21 working capital amount which is added or subtracted from the Company's rate base.

22
23 **Q. Did the Company perform a lead lag study in this case?**

24 A. Yes.

1 **Q. Was Staff able to use the Company's study to calculate cash working capital?**

2 A. Yes.

3
4 **Q. Does Staff agree with the results of the Company's lead lag study?**

5 A. With one exception, Staff agrees with the number of days proposed by the Company for
6 its lead lag computation.

7
8 **Q. Please explain.**

9 A. Staff does not agree with the Company's calculation of lead days for its Customer
10 Accounting Expense group. In this group, the Company incorrectly includes its Bad Debt
11 Expense. By including Bad Debt Expense in this line item calculation, the Company's
12 lead lag days is reduced from 20.31 days to 10.09 days. This reduction increases the
13 amount of cash working capital needed by the Company.

14
15 **Q. What does Staff recommend for the treatment of Bad Debt Expense?**

16 A. Staff recommends that Bad Debt Expense not be considered in the lead lag computation
17 since bad debts have no associated cash outlay and, therefore, have no corresponding
18 expense lag days. After excluding bad debt expense, the resulting expense lag-days for
19 Customer Accounting should be 20.31 days.

20
21 **Q. Does Staff have other concerns with the computation of cash working capital?**

22 A. Yes.

1 **Q. Please explain.**

2 A. In addition to the number of lead lag days assigned to each line item, the computation of
3 cash working capital must reflect the adjusted value of expenses to which the lead lag days
4 are applied. Accordingly, Staff's calculation reflects Staff's adjusted test year expenses as
5 reflected in Schedule GWB-11, adjusted for the removal of Chemical Expense (dollars)
6 and Bad Debt Expense (dollars) included in Customer Accounting Expense.

7
8 **Q. Please explain the reasons to remove Chemical Expenses from the computation of**
9 **cash working capital.**

10 A. For all systems in this docket, the amounts recorded as Chemical Expenses do not
11 constitute a direct cash expense. Instead, Chemical Expenses, as recorded by the
12 Company, represent issuances from the Company's materials and supplies inventory
13 which is already included in rate base as a separate component of the collective Working
14 Capital calculation. Hence, the inclusion of amounts recorded as Chemical Expenses in
15 the computation of the cash working capital component of the collective Working Capital
16 computation would result in the double counting of this item in rate base.

17
18 **Q. Please explain the reasons to remove Bad Debt Expense from the Customer**
19 **Accounting Expense in the cash working capital computation.**

20 A. Bad Debt expense does not represent a cash outlay like that experienced with other cash
21 expenses; rather, Bad Debt expense represents amounts not collected. The provision for
22 bad debt expense is included in rates and is collected on a timely basis from the paying
23 customers. For these reasons, Staff recommends that Bad Debt Expense not be considered
24 in the computation of cash working capital.

1 **Q. Was Staff able to produce its own estimates of cash working capital for this system?**

2 A. Yes. As indicated in Schedule GWB-7, Staff recomputed the cash working capital for the
3 Sun City Water system and provides a comparison of the Staff-recommended total with
4 the Company's proposal.

5
6 **Q. What does Staff recommend?**

7 A. Staff recommends approval of the recalculated cash working capital amounts as shown for
8 the Sun City Water system in Schedules GWB-4 and GWB-8.

9
10 **Rate Base Adjustment No. 4 – CIAC Associated with CWIP**

11 **Q. Please describe how CIAC (and AIAC) relate to plant in service and rate base.**

12 A. CIAC and AIAC represent funds or plant provided to the Company by parties other than
13 investors. Typically, funds received as CIAC or AIAC are used to build plant which may
14 ultimately be in rate base. Plant that is used and useful for the provision of utility service
15 is a components of rate base. CIAC and AIAC are also components of rate base. As
16 components of rate base, plant differs from CIAC and AIAC in that plant in service
17 increases rate base and CIAC and AIAC decrease rate base. Plant that is under
18 construction (CWIP) is normally not a component of the rate base calculation. Thus,
19 funds received as CIAC or AIAC that are funding CWIP are included in the rate base
20 calculation while the CWIP is not included in the rate base calculation. As a result, the
21 plant included in the rate base calculation may not equal CIAC and AIAC funds received.

22
23 **Q. Please describe the Company's position.**

24 A. The Company asserts that it has received CIAC related to plant that is not yet completed
25 (i.e., CWIP) and not reflected in its rate base. The Company further states that since

1 CWIP is not an addition to rate base, the related CIAC should not be a reduction in the
2 rate base calculation.
3

4 **Q. Is the Company's position is a departure from traditional ratemaking practices?**

5 A. Yes. The Company's position is a departure from traditional ratemaking practices.
6

7 **Q. Please explain.**

8 A. According to the NARUC USOA account no. 271, CIAC includes:
9

10 *Any amount or item of money, services or property received by a utility[,] . . .*
11 *any portion of which is provided at no cost to the utility, which represents an*
12 *addition or transfer to the capital of the utility, and which is utilized to offset*
13 *the acquisition, improvement or construction costs of the utility's property,*
14 *facilities or equipment used to provide utility services to the public.*
15 *(Emphasis added).*
16

17 The Company has use of the funds or plant advanced or contributed by others, thereby
18 offsetting the need for investors to commit funds for utility facilities or equipment.
19

20 Further, the NARUC Rate Case and Audit Manual⁴ instructs that the impact of such
21 contributions for ratemaking is to "reduce the rate base as a source of non-investor
22 supplied capital." Accordingly, the Company's rate base should be reduced by the amount
23 of CIAC.
24

25 **Q. What does Staff recommend?**

26 A. Staff recommends that the CIAC and AIAC funds the Company asserts are related to
27 CWIP be reflected in the CIAC and AIAC balances used to calculate and properly reflect

⁴ Rate Case and Audit Manual Prepared by NARUC Staff Subcommittee on Accounting and Finance (2003), p.22, available at http://www.naruc.org/Publications/ratecase_manual.pdf.

1 a reduction to rate base. For the Sun City Water District, a \$38,991 adjustment to increase
2 CIAC is appropriate, as shown in Schedule GWB-9.

3
4 **SUN CITY WATER - OPERATING INCOME ADJUSTMENTS**

5 **Q. Is staff recommending any adjustments to operating income in this case?**

6 A. Yes. Staff is recommending the following adjustments.

7
8 **Sun City Water Operating Income Adjustment No. 1 – Fuel and Power Expense**

9 **Q. What is the Company proposing for Fuel and Power Expense?**

10 A. AAWC is proposing the test year recorded amount and pro forma amounts to reflect the
11 APS interim rate increase but not the APS increase ultimately approved by the
12 Commission. For the test year, the Company proposes \$1,722,582 for Fuel and Power
13 Expense.

14
15 **Q. Does Staff agree with the Company's proposed amount?**

16 A. No. The Company provided updated schedules to reflect the increase ultimately approved
17 in the recent APS rate case and to correct some errors in the original filing. The updated
18 spreadsheet indicates that the Fuel and Power Expense is expense to increase an additional
19 \$248,073 to \$1,970,655, shown in Schedule GWB-12.

20
21 **Q. What is Staff's recommendation for Fuel and Power Expense?**

22 A. Staff recommends an increase to Fuel and Power Expense of \$248,073 from \$1,722,582 to
23 \$1,970,655, as shown in Schedule GWB-12. A reduction to the \$1,970,655 amount for
24 excess water losses is appropriate, as discussed below in Operating Expense Adjustment
25 No. 2.

Sun City Water Operating Income Adjustment No. 2 – Water Loss Expense Adjustment re:

Fuel and Power and Chemicals Expense

Q. What is Staff recommending as an additional adjustment to Fuel and Power Expense?

A. Staff is recommending a decrease of \$19,511 from, \$1,970,655 to \$1,951,144 and shown in Schedule GWB-13.

Q. Why is Staff recommending an additional adjustment to Fuel and Power Expense?

A. Staff is recommending this adjustment because the system's non-account water loss exceeds 10 percent. For this system, non-account water is 11.1 percent.

Q. Please explain.

A. When non-account water exceeds 10 percent, Staff customarily adjusts Fuel and Power Expense and Chemicals Expense proportionately.

Q. How is the calculation performed?

A. Staff divides the allowable system loss of 10 percent plus 1 by the actual system loss plus 1. In other words, Staff divides 110 percent by 111.1 percent to determine the percent of allowable costs. Then, Staff subtracts the percent of allowable costs from 1 to determine a disallowance percentage.

Q. Please illustrate the calculation for this system.

A. Dividing 110 by 111.1 equals approximately 99.01 percent, which is the allowable percentage. One minus the approximately 99.01 percent leaves approximately 0.99 percent as the disallowance percentage. Staff then applies the 0.99 percent to Fuel and Power and Chemical Expenses to calculate the amount of disallowance. In this case, Fuel and Power Expense has an interim value of \$1,970,655, net of Operating Expense

1 Adjustment No. 1. To the interim amount of \$1,970,655, Staff applies the disallowance
2 percent of approximately 0.99 to determine that \$19,511 should be disallowed from the
3 Fuel and Power Expense account, as shown in Schedule GWB-13.

4
5 A similar calculation to the Chemicals Expense of \$37,037 results in a \$367 disallowance,
6 as shown in Schedule GWB-13.

7
8 **Q. What is Staff's recommendation for Fuel and Power and Chemicals Expense?**

9 A. Staff recommends a net increase to Fuel and Power Expense of \$228,562 (\$248,073 less
10 19,511) from \$1,722,582 to \$1,951,144 as shown in Schedules GWB-12 and GWB-13.
11 Staff also recommends a decrease Chemicals Expense of \$367 from \$37,037 to \$36,671 as
12 shown in Schedules GWB-13.

13
14 **Sun City Water Operating Income Adjustment No. 3 – Customer Accounting Expense**

15 **Q. What is the Company proposing for Customer Accounting Expense?**

16 A. Arizona-American is proposing a total of \$235,348. The Customer Accounting Expense
17 amount includes \$96,988 for Bad Debt Expense, as shown in Schedule GWB-14.

18
19 **Q. Does Staff agree with the Company's proposed amount?**

20 A. No. The Company provided a spreadsheet detailing its three-year experience for Bad
21 Debt Expense. In this schedule, the Company indicates that Bad Debt Expense is 0.15
22 percent of revenues. Staff recalculated Bad Debt Expense based on Staff's recommended
23 test year revenues of \$9,283,101 and determined a Bad Debt Expense of \$13,830, a
24 difference of \$83,158.

1 **Q. What is Staff proposing for Customer Accounting Expense?**

2 A. Staff is proposing a decrease to Customer Accounting Expense of \$83,158, from \$235,348
3 to \$152,191, to remove the excess Bad Debt Expense, as shown in Schedules GWB-11
4 and GWB-14.

5
6 **Sun City Water Operating Income Adjustment No. 4 – Water Testing Expense**

7 **Q. What is the Company proposing for Water Testing Expense?**

8 A. Arizona-American is proposing water testing expenses of \$12,173 which are included the
9 Miscellaneous Expenses of \$300,084 in the test year.

10

11 **Q. Does Staff agree with the Company's proposed amount?**

12 A. No. Staff has recalculated the Water Testing Expense to be \$3,787, or \$8,386 less than
13 the Company's proposed amounts.

14

15 **Q. What is Staff recommendation for Miscellaneous Expense?**

16 A. Staff recommends a decrease to Miscellaneous of \$8,386 from \$300,084 to \$291,698, as
17 shown in Schedule GWB-15.

18

19 **Sun City Water Operating Income Adjustment No. 5 – Depreciation Expense**

20 **Q. What amount of depreciation expense is AAWC proposing?**

21 A. AAWC is proposing depreciation expense of \$1,565,706.

22

23 **Q. What are the components of the Company's proposed depreciation expense?**

24 A. AAWC proposed depreciation expense consists of test year depreciation expense plus pro
25 forma adjustments to recognize depreciation on post test year plant additions and the
26 amortization of contributions in aid of construction ("CIAC").

1 **Q. How did AAWC calculate each component of its proposed depreciation expense for**
2 **each of the five systems?**

3 A. The Company calculated test year depreciation expense by multiplying the original cost of
4 its depreciable test year plant in service by the depreciation rates approved in the prior rate
5 proceedings.

6
7 **Q. Did Staff recompute the Company's depreciation expense?**

8 A. Yes. Staff recomputed depreciation expense based on Staff's recommended total plant in
9 service and the depreciation rates recommended in this proceeding. Staff uses the same
10 methodology as the Company to calculate depreciation expense. Staff's calculation
11 differs from the Company's due to the use of Staff's recommended plant in service, which
12 differs from the Company's, as well as some differences in the depreciation rates, and
13 differences in gross CIAC. Staff and the Company reduced depreciation expense for the
14 amortization of CIAC in accordance with the NARUC USOA.

15
16 **Q. What is Staff's recommendation?**

17 A. Staff recommends a decrease in depreciation expense of \$8,167 from \$1,565,706 to
18 \$1,557,539.

19
20 **Sun City Water Operating Income Adjustment No. 6 – Income Taxes**

21 **Q. What is the Company proposing for test year Income Tax Expense?**

22 A. The Company is proposing \$9,746 for test year Income Tax Expense.

23
24 **Q. How did Staff calculate test year income tax expense?**

25 A. Staff calculated test year income tax expense by applying the statutory State and Federal
26 income tax rates to Staff's adjusted test year taxable income as shown on Schedule GWB-

1 2. Since the Company files a consolidated tax return with other systems and the average
2 and marginal tax rates are 34 percent when federal taxable income is over \$335,000, Staff
3 has assigned a 34 percent federal tax rate to the test year income.

4
5 **Q. Did Staff prepare a schedule showing the computation of test year income taxes?**

6 A. Yes. Staff's computation of income taxes is shown in Schedule GWB-2.

7
8 **Q. Did Staff make any adjustments to test year Income Tax Expense?**

9 A. Yes. Staff's adjustment reflects Staff's calculation of the income tax expense based upon
10 Staff's adjusted test year taxable income, as shown in Schedule GWB-2.

11
12 **Q. What is Staff's recommendation?**

13 A. Staff recommends decreasing test year Income Tax Expense by \$46,906 from \$9,746 to
14 negative \$37,160, as shown in Schedules GWB-2 and GWB-11.

15
16 **Sun City Water Operating Income Adjustment No. 7 – Rate Case Expense**

17 **Q. What did the Company include in rate case expense?**

18 A. In its calculation of rate case expense, the Company included \$12,500 for its "Expected
19 Unamortized Balance as of 9/2010" of \$37,500 to be recovered over three years, along
20 with the estimated rate case expense of the instant proceeding.

21
22 **Q. Please explain Staff's position.**

23 A. Consistent with past recommendations adopted by the Commission, Staff recommends
24 exclusion of unrecovered rate case expense relate to prior proceedings. Staff's
25 recommendation reflects "normalization" as opposed to "amortization" of rate case
26 expense.

1 **Q. Please explain the technical distinction between normalization and amortization.**

2 A. Normalization represents the anticipated average annual expense and the amount included
3 in test year expenses. The normalized level of expense is then updated in subsequent
4 proceedings and included as test year expense in the future proceeding with no
5 consideration of unrecovered amounts associated with activity in the prior case. In
6 contrast, amortization relates to the systematic recovery of an asset, or in the case of
7 CIAC, amortization is the systematic disposition of the cost free funds or property
8 received. In accounting terms, assets and CIAC are balance sheet, or permanent, accounts
9 with balances that carry over from prior years; therefore, amortized asset and CIAC
10 balances are eligible for consideration in future rates. In contrast, normalized expenses are
11 operating income, or temporary, accounts which are closed out each year and not eligible
12 for consideration in future rates.

13
14 **Q. What does Staff recommend?**

15 A. As shown in Schedule GWB-18, Staff recommends a decrease in Rate Case Expense of
16 \$12,500 from \$75,286 to \$62,786 for the amount that the Company proposes to include
17 from prior proceedings.

18
19 **Sun City Water Operating Income – Property Taxes**

20 **Q. What is the Company proposing for Test Year Property Tax Expense for it water**
21 **division?**

22 A. The Company is proposing \$156,074 for Test Year property tax expense. The Company's
23 proposed property tax expense is calculated on the modified ADOR methodology
24 typically adopted by the Commission for water and wastewater utilities. The results from
25 using this methodology are primarily dependent upon the test year and proposed revenues.
26 In other words, each revenue requirement has its own property tax expense in the same

1 manner as each operating income has its own income tax expenses. Although the results
2 for this methodology are frequently referred to as Test Year amounts, in fact, the results
3 are representative of the average expected property tax over a subsequent three-year
4 period based partially on proposed revenues. The Company's calculation of proposed
5 property taxes is representative of proposed revenues. Therefore, if the Commission were
6 to adopt any revenue requirement other than that proposed by the Company, the
7 Company's proposed property tax would not correspond with the adopted revenues.
8

9 **Q. Has Staff developed a solution to address the dependent relationship between**
10 **Property Tax Expense and revenues?**

11 A. Yes. Staff has included a factor for property taxes in the GRCF (see Schedule GWB-2)
12 that automatically adjusts the revenue requirement for changes in revenue in the same way
13 that income taxes are adjusted for changes in operating income. This flexible method will
14 accurately reflect Property Tax Expense at any authorized revenue level. This refinement
15 removes the need to include proposed revenues in the calculation of Test Year Property
16 Tax Expense and allows for accurate calculation of Property Tax Expense at the Test Year
17 revenue level.
18

19 **Q. What did Staff calculate for Test Year Property Tax Expense?**

20 A. Staff calculated \$156,074 for Test Year Property Tax Expense as shown in Schedule
21 GWB-18.⁵

⁵ Schedule GWB-18 also shows calculations for Property Tax Expense of \$168,342 for Staff's recommended revenue.

1 **Q. What is Staff recommending?**

2 A. Staff recommends adopting the Company's Test Year Property Tax Expense of \$156,074.
3 Staff further recommends adoption of its GRCF that includes a factor for Property Tax
4 Expense as shown in Schedule GWB-2.

5
6 **OTHER CONSIDERATIONS**

7 **Q. Are there other considerations that Staff would like to discuss?**

8 A. Yes.
9

10 **Q. Please explain.**

11 A. Toward the end of the review, Staff became aware that the Company understated the total
12 amount of capital additions recorded for a well and other plant, known as plant #9 and
13 well locations 9.2 and 9.3. The total understatement is approximately \$365,578. Further,
14 Staff also became aware that some items were recorded in incorrect accounts and should
15 be reclassified to the correct NARUC accounts.

16
17 **Q. Will this omission increase the net base?**

18 A. No. Staff expects that there will be no impact on rate base.
19

20 **Q. Please explain.**

21 A. All of the additions to plant known as plant #9 and well locations 9.2 and 9.3 were
22 contributed to the Company by a developer and, therefore, should be offset by a
23 corresponding amount in Contributions in Aid of Construction.

24
25 **Q. What is Staff recommending?**

26 A. Staff asks that the Company address these corrections in its rebuttal testimony.

1 **Q. Does this conclude your Direct Testimony?**

2 **A. Yes, it does.**

ARIZONA-AMERICAN WATER COMPANY - ANTHEM WATER

Docket No. WS-01303A-09-0343

Test Year Ended December 31, 2008

DIRECT TESTIMONY OF GERALD BECKER

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REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	\$ 57,430,024	\$ 57,430,024	\$ 57,368,047	\$ 57,368,047
2	Adjusted Operating Income (Loss)	\$ 514,449	\$ 514,449	\$ 548,175	\$ 548,175
3	Current Rate of Return (L2 / L1)	0.90%	0.90%	0.96%	0.96%
4	Required Rate of Return	8.53%	8.53%	7.20%	7.20%
5	Required Operating Income (L4 * L1)	\$ 4,898,781	\$ 4,898,781	\$ 4,130,499	\$ 4,130,499
6	Operating Income Deficiency (L5 - L2)	\$ 4,384,332	\$ 4,384,332	\$ 3,582,325	\$ 3,582,325
7	Gross Revenue Conversion Factor	1.6578	1.6578	1.6578	1.6578
8	Required Revenue Increase (L7 * L6)	\$ 7,268,172	\$ 7,268,172	\$ 5,938,668	\$ 5,938,668
9	Adjusted Test Year Revenue	\$ 7,483,274	\$ 7,483,274	\$ 7,483,274	\$ 7,483,274
10	Proposed Annual Revenue (L8 + L9)	\$ 14,751,446	\$ 14,751,446	\$ 13,421,942	\$ 13,421,942
11	Required Increase in Revenue (%)	97.13%	97.13%	79.36%	79.36%
12	Rate of Return on Common Equity (%)	12.25%	12.25%	10.20%	10.20%

References:

Column (A): Company Schedule A-1 (revised)

Column (B): Company Schedule A-1 (revised)

Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)
<u>Calculation of Gross Revenue Conversion Factor:</u>				
1	Revenue	100.0000%		
2	Uncollectible Factor (Line 11)	0.2763%		
3	Revenues (L1 - L2)	99.7237%		
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.4017%		
5	Subtotal (L3 - L4)	60.3220%		
6	Revenue Conversion Factor (L1 / L5)	1.657769		
<u>Calculation of Uncollectible Factor:</u>				
7	Unity	100.0000%		
8	Combined Federal and State Tax Rate (Line 17)	38.5989%		
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%		
10	Uncollectible Rate	0.4500%		
11	Uncollectible Factor (L9 * L10)		0.2763%	
<u>Calculation of Effective Tax Rate:</u>				
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%		
13	Arizona State Income Tax Rate	6.9680%		
14	Federal Taxable Income (L12 - L13)	93.0320%		
15	Applicable Federal Income Tax Rate (Line 44)	34.0000%		
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%		
17	Combined Federal and State Income Tax Rate (L13 + L16)		38.5989%	
<u>Calculation of Effective Property Tax Factor</u>				
18	Unity	100.0000%		
19	Combined Federal and State Income Tax Rate (L17)	38.5989%		
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%		
21	Property Tax Factor (GWB-17, L24)	1.3074%		
22	Effective Property Tax Factor (L20*L21)		0.8028%	
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.4017%
24	Required Operating Income (Schedule GWB-1, Line 5)	\$ 4,130,499		
25	Adjusted Test Year Operating Income (Loss) (Schedule GWB-10, Line 42)	\$ 548,175		
26	Required Increase in Operating Income (L24 - L25)		\$ 3,582,325	
27	Income Taxes on Recommended Revenue (Col. (F), L52)	\$ 1,514,669		
28	Income Taxes on Test Year Revenue (Col. (C), L52)	\$ (737,305)		
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		\$ 2,251,974	
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	\$ 13,421,942		
31	Uncollectible Rate (Line 10)	0.4500%		
32	Uncollectible Expense on Recommended Revenue (L30 * L31)	\$ 60,399		
33	Adjusted Test Year Uncollectible Expense	\$ 33,675		
34	Required Increase in Revenue to Provide for Uncollectible Exp.		\$ 26,724	
35	Property Tax with Recommended Revenue (GWB-17, Line 19)	\$ 370,598		
36	Property Tax on Test Year Revenue (GWB-17, Col A, L16)	\$ 292,953		
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		\$ 77,645	
38	Total Required Increase in Revenue (L26 + L29 + L34+ L37)		\$ 5,938,668	

	(A)	(B)	(C)
	Test Year Anthem Water		Staff Recommended Anthem Water
<u>Calculation of Income Tax:</u>			
39	Revenue (Sch GWB-9, Col.(C) L5, GWB-1, Col. (D), L9)	\$ 7,483,274	\$ 13,421,942
40	Operating Expenses Excluding Income Taxes	\$ 7,672,404	\$ 7,776,773
41	Synchronized Interest (L52)	\$ 1,721,041	\$ 1,721,041
42	Arizona Taxable Income (L39 - L40 - L41)	\$ (1,910,172)	\$ 3,924,128
43	Arizona State Income Tax Rate	6.9680%	6.9680%
44	Arizona Income Tax (L42 x L43)	\$ (133,101)	\$ 273,433
45	Federal Taxable Income (L42 - L44)	\$ (1,777,071)	\$ 3,650,695
46	Federal Tax @ 34%	\$ (604,204)	\$ 1,241,236
47	Total Federal Income Tax	\$ (604,204)	\$ 1,241,236
48	Combined Federal and State Income Tax (L43 + L47)	\$ (737,305)	\$ 1,514,669
49	Effective Tax Rate		34.0000%
<u>Calculation of Interest Synchronization:</u>			
50	Rate Base (Schedule GWB-3, Col. (C), Line 18)		\$ 57,368,047
51	Weighted Average Cost of Debt		3.0000%
52	Synchronized Interest (L50 X L51)		\$ 1,721,041

RATE BASE - ORIGINAL COST

LINE NO.	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	\$ 90,684,602	\$ 90,684,602
2	Less: Accumulated Depreciation	12,905,766	12,905,766
3	Net Plant in Service	<u>\$ 77,778,836</u>	<u>\$ 77,778,836</u>
<u>LESS:</u>			
4	Contributions in Aid of Construction (CIAC)	\$ 2,511,217	\$ 2,541,488
5	Less: Accumulated Amortization	117,946	117,946
6	Net CIAC	<u>2,393,271</u>	<u>2,423,542</u>
7	Advances in Aid of Construction (AIAC)	18,557,742	18,557,742
8	Imputed Reg AIAC	-	-
9	Imputed Reg CIAC	326,764	326,764
10	Customer Meter Deposits	1,920	1,920
<u>ADD:</u>			
11	Deferred Income Tax Credits (Debits)	720,067	701,487
12	Cash Working Capital	73,130	60,005
13	Prepayments	30,693	30,693
14	Supplies Inventory	55,281	55,281
15	Projected Capital Expenditures	-	-
16	Deferred Debits	51,714	51,714
17	Purchase Wastewater Treatment Charges	-	-
18	Original Cost Rate Base	<u>\$ 57,430,024</u>	<u>\$ 57,368,047</u>

References:

Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 GWB-5	[C] ADJ #2 GWB-6	[D] ADJ #3 GWB-7	[E] ADJ #4 GWB-8	[F] STAFF ADJUSTED
<u>PLANT IN SERVICE:</u>								
1	301000	Organization	-					\$ -
2	302000	Franchises	\$ 4,719,239					\$ 4,719,239
3	303200	Land & Land Rights SS	6,014,990					6,014,990
4	303300	Land & Land Rights P	20,000					20,000
5	303400	Land & Land Rights	-					-
	303500	Land & Land Rights TD	-					-
6	303600	Land & Land Rights AG	-					-
7	304100	Struct & Imp SS	4,724,837					4,724,837
8	304200	Struct & Imp P	2,827,247					2,827,247
9	304300	Struct & Imp WT	1,058,498	(22,289)				1,036,209
10	304400	Struct & Imp TD	112,667					112,667
	304600	Struct & Imp Offices	110,668					110,668
11	304800	Struct & Imp Misc	-					-
12	305000	Collect & Impounding	305,278					305,278
	306000	Lake, River & Other Intakes	405,221					405,221
13	307000	Wells & Springs	92,902					92,902
14	308000	Infiltration Galleries & Tunnels	245,768					245,768
15	310100	Power Generation Equip Other	-					-
16	311200	Pump Equip Electric	11,714,674					11,714,674
17	311300	Pump Equip Diesel	-					-
18	311500	Pump Equip Other	10,327					10,327
19	320100	WT Equip Non-Media	10,952,910	22,289				10,975,199
20	320200	WT Equip Filter Media	824,366					824,366
21	330900	Dist Reservoirs & Standpipe	4,290,367					4,290,367
22	331001	TD Mains Not Classified by Size	3,298,808					3,298,808
23	331100	TD Mains 4in & Less	15,496,418					15,496,418
24	331200	TD Mains 6in to 8in	7,782,150					7,782,150
25	331300	TD Mains 10in to 16in	4,502,911					4,502,911
26	333000	Services	2,018,339					2,018,339
27	334100	Meters	839,713					839,713
28	334200	Meter Installations	353,074					353,074
29	334300	Meter Vaults	14,599					14,599
30	335000	Hydrants	2,003,910					2,003,910
31	339100	Other P/E Intangible	-					-
32	339500	Other P/E TD	-					-
33	340100	Office Furniture & Equip	160,631					160,631
34	340200	Comp & Periph Equip	24,647					24,647
35	341100	Trans Equip LI Duty Trks	125,754					125,754
36	341200	Trans Equip Hvy Duty Trks	60,218					60,218
37	341300	Transportation Equipment - Other	-					-
38	341400	Trans Equip Other	17,286					17,286
39	342000	Stores Equipment	-					-
40	343000	Tools, Shop, Garage Equip	30,146					30,146
41	344000	Laboratory Equipment	118,788					118,788
42	345000	Power Operated Equipment	4,719					4,719
43	346100	Comm Equip Non-Telephone	137,719					137,719
44	346190	Remote Control & Instrumentation	9,960					9,960
45	346200	Comm Equip Telephone	22,846					22,846
46	346300	Comm Equip Other	12,107					12,107
47	347000	Miscellaneous Equipment	4					4
48			-					-
49		Allocated from Corporate	-					-
50	303600	Land & Land Rights AG	-					-
51	304510	Struct & Imp AG Cap Lease	-					-
52	304600	Struct & Imp Offices	-					-
53	304800	Struct & Imp Misc	-					-
54	304620	Struct & Imp Leasehold	10,933					10,933
55	331001	Mains	-					-
56	339600	Other P/E CPS	2,855					2,855
57	340100	Office Furniture & Equip	63,745					63,745
58	340200	Comp & Periph Equip	27,688					27,688
59	340300	Computer Software	100,535					100,535
60	340330	Comp Software Other	2,585					2,585
61	340500	Other Office Equipment	-					-
62	341100	Trans Equip LI Duty Trks	-					-
63	343000	Tools, Shop, Garage Equip	-					-
64	344000	Laboratory Equipment	-					-
65	345000	Power Operated Equipment	-					-
66	346100	Comm Equip Non-Telephone	10,287					10,287
67	346200	Comm Equip Telephone	793					793
68	346300	Comm Equip Other	271					271
69			-					-
70		Phoenix Interconnect	5,000,000					5,000,000
71		Total Plant in Service	90,684,602					90,684,602
72		Amortization of Phoenix Interconnect	116,667					116,667
73		Accumulated Depreciation	12,789,099					12,789,099
74		Net Plant in Service (L58 - L 59)	\$ 77,778,836	\$ -	\$ -	\$ -	\$ -	\$ 77,778,836
75								
76		<u>LESS:</u>						
77		Contributions in Aid of Construction (CIAC)	2,511,217		\$ -	\$ -	\$ 30,271	2,541,488
78		Less: Accumulated Amortization	117,946					117,946
79		Net CIAC (L63 - L64)	2,393,271				30,271	2,423,542
80		Advances in Aid of Construction (AIAC)	18,557,742					18,557,742
81		Imputed Reg Advances	-					-
82		Imputed Reg CIAC	326,764					326,764
83		Accumulated Deferred Income Tax Credits	-					-
84		Customer Meter Deposits	1,920					1,920
85		<u>ADD:</u>						
85		Accumulated Deferred Income Tax (Debits)	720,067			(18,580)		701,487
86		Working Capital Allowance	73,130		(13,125)			60,005
87		Pumping Power	-					-
88		Purchase Wastewater Treatment Charges	-					-
89		Material and Supplies Inventory	55,281					55,281
90		Prepayments	30,583					30,583
91		Projected Capital Expenditures	-					-
92		Deferred Debits	51,714					51,714
93		Original Cost Rate Base	\$ 57,430,024	\$ -	\$ (13,125)	\$ (18,580)	\$ (30,271)	\$ 57,388,047

ARIZONA-AMERICAN WATER COMPANY - ANTHEM WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-5

RATE BASE ADJUSTMENT #1 - PLANT IN SERVICE

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	304300	Dist Reservoirs & Standpipe Plant	1,058,498	(22,289)	1,036,209
	320100	WT Equip Non-Media	10,952,910	22,289	10,975,199

References:

Column [A]: Amounts included in plant balances per filing.

Column (B): Per Engineering Report

Column (C): Column [A] plus Column [B]

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL PER COMPANY

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] COMPANY ADJUSTMENTS	[C] COMPANY AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	754,087	-	754,087	12.00	9,049,047
2	Purchased Water	625,435	-	625,435	50.92	31,844,918
3	Fuel & Power	1,259,637		1,259,637	22.70	28,588,352
4	Chemicals	103,351		103,351	8.73	901,789
5	Waste Disposal	1,933		1,933	4.55	8,803
6	Management Fees	1,158,078		1,158,078	14.77	17,106,549
7	Group Insurance	209,326		209,326	(13.70)	(2,868,562)
8	Pensions	105,808		105,808	(2.37)	(250,596)
9	Insurance Other Than Group	71,553		71,553	(83.68)	(5,987,870)
10	Customer Accounting	183,101		183,101	10.09	1,847,360
11	Rents	33,826		33,826	-	-
12	General Office Expense			-	-	-
13	Miscellaneous	229,300		229,300	8.89	2,039,440
14	Maintenance Expense	140,803		140,803	33.61	4,732,543
15	Other Corporate Pro Forma	124,533		124,533	30.00	3,735,990
16	General Taxes-Property	292,953		292,953	191.29	56,040,163
17	General Taxes-Other	34,882		34,882	13.35	465,547
18	Income Taxes	1,996,468		1,996,468	30.13	60,153,581
19	Interest		1,722,901	1,722,901	106.25	183,058,231
20	Total Operating Expenses	7,325,076	1,722,901	9,047,977		390,465,286
21		9,047,977				
22						
23	Expense Lag	Line 20, Col. (E) / Col [C]	43.15			
24	Revenue Lag	Company Workpapers	46.105			
25	Net Lag	Line 24 - 23	2.95			
26	Company Adjusted Expenses	Line 20, Col [C]	9,047,977			
27	Cash Working Capital	Line 25 * Line 26/365 day	73,130			
28	Company As Filed	Co Schedule B-5	73,130			
29	Difference		-			
30						
31	References:					
32	Column [A]:	Company Schedule C--1, plus revisions docketed August 21, 2009				
33	Column [B]:	Staff adjustments to expenses, See Testimony GWB				
34	Column [C]:	Column [A] + Column [B]				
35	Column [D]:	Expense Lags Per the Company's Lead Lag Study in this proceeding				
36	Column [E]:	Column [C] * Column [D]				

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL PER STAFF

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	754,087	\$ -	754,087	12.00	\$ 9,049,047
2	Purchased Water	625,435	-	625,435	50.92	\$ 31,844,918
3	Fuel & Power	1,259,637	83,883	1,343,521	22.70	\$ 30,492,144
4	Chemicals	103,351	(103,351)	-	8.73	\$ -
5	Waste Disposal	1,933	-	1,933	4.55	\$ 8,803
6	Management Fees	1,158,078	-	1,158,078	14.77	\$ 17,106,549
7	Group Insurance	209,326	-	209,326	(13.70)	\$ (2,868,562)
8	Pensions	105,808	-	105,808	(2.37)	\$ (250,596)
9	Insurance Other Than Group	71,553	-	71,553	(83.68)	\$ (5,987,870)
10	Customer Accounting	183,101	(67,224)	115,877	20.31	\$ 2,353,207
11	Rents	33,826	-	33,826	-	\$ -
12	General Office Expense	-	-	-	-	\$ -
13	Miscellaneous	229,300	-	229,300	8.89	\$ 2,039,440
14	Maintenance Expense	140,803	-	140,803	33.61	\$ 4,732,543
15	Other Corporate Pro Forma	124,533	-	124,533	30.00	\$ 3,735,990
16	General Taxes-Property	292,953	-	288,011	191.29	\$ 55,094,788
17	General Taxes-Other	34,882	-	34,882	13.35	\$ 465,547
18	Income Taxes	1,996,468	-	1,996,468	30.13	\$ 60,153,581
19	Interest	1,722,901	59	1,722,960	106.25	\$ 183,064,500
20	Total Operating Expenses	9,047,977	(86,633)	8,956,402		391,034,030
21						
22						
23	Expense Lag	Line 20, Col. (E) / Col [C]	43.66			
24	Revenue Lag	Company Workpapers	46.105			
25	Net Lag	Line 24 - 23	2.45			
26	Staff Adjusted Expenses	Line 20, Col [C]	8,956,402			
27	Cash Working Capital	Line 25 * Line 26/365 day	60,005			
28	Company As Filed	Co Schedule B-5	73,130			
29	Staff Adjustment (L28-L27)	To GWB-4	(13,125)			
30						
31	References:					
32	Column [A]: Per Company, See Schedule GWB-5, Col [C]					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB, or to Working Cap. Calculation					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Per the Company's Lead Lag Study in this proceeding					
36	Column [E]: Column [C] * Column [D]					

RATE BASE ADJUSTMENT #3 - ACCUMULATED DEFERRED INCOME TAXES

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Beginning Balance Per Decision No. 67093	\$ 13,025,093	\$ (336,093)	\$ 12,689,000
2	Allocation Factor	5.53%	5.53%	5.53%
3	Allocation to Anthem	720,068	(18,580)	701,488

REFERENCES:

Columns [A], Line 1: Amounts used by Co as basis for allocation

Column [A], [B] & [C], Line 2: Allocation rate to this system

Column [C], Line 1: Allocable amount per audited financial statements times allocation rate

Column [A], [B] & [C], Line 3: Calculation of allocated amounts

ARIZONA-AMERICAN WATER COMPANY - ANTHEM WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB - 9

RATE BASE ADJUSTMENT #4 - CIAC ASSOCIATED WITH CWIP

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2008	2,511,217	30,271	2,541,488

REFERENCES:

Columns [A]: Company schedules

Column [B]: Column [C] less Column [A]

Column [C]: See testimony GWB

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Wastewater Revenues	\$ 7,210,624	\$ -	\$ 7,210,624	\$ 5,938,668	\$ 13,149,292
3	Other Wastewater Revenues	272,650	-	272,650	-	272,650
4	Other	-	-	-	-	-
5	Total Operating Revenues	\$ 7,483,274	\$ -	\$ 7,483,274	\$ 5,938,668	\$ 13,421,942
6	Labor	\$ 754,087	\$ -	754,087	\$ -	\$ 754,087
7	Purchased Water	\$ 625,435	-	625,435	-	625,435
8	Fuel & Power	\$ 1,259,637	83,863	1,343,521	-	1,343,521
9	Chemicals	\$ 103,351	-	103,351	-	103,351
10	Waste Disposal	\$ 1,933	-	1,933	-	1,933
11	Management Fees	\$ 1,158,078	-	1,158,078	-	1,158,078
12	Group Insurance	\$ 209,326	-	209,326	-	209,326
13	Pensions	\$ 105,808	-	105,808	-	105,808
14	Regulatory Expense	\$ 64,489	(12,500)	51,989	-	51,989
15	Insurance Other Than Group	\$ 71,553	-	71,553	-	71,553
16	Customer Accounting	\$ 183,101	(33,363)	149,738	26,724	176,462
17	Rents	\$ 33,826	-	33,826	-	33,826
18	General Office Expense	\$ 60,044	-	60,044	-	60,044
19	Miscellaneous	\$ 229,300	-	229,300	-	229,300
20	Maintenance Expense	\$ 140,803	-	140,803	-	140,803
21	Depreciation & Amortization	\$ 2,399,893	-	2,399,893	-	2,399,893
22	General Taxes-Property	\$ 292,953	(94,116)	2,305,776	-	2,305,776
23	General Taxes-Other	\$ 34,882	-	292,953	77,645	370,598
24	Income Taxes	\$ (759,675)	22,370	34,882	-	34,882
25	Total Operating Expenses	\$ 6,968,825	(33,726)	(737,305)	2,251,974	1,514,669
26	Operating Income (Loss)	\$ 514,449	\$ 33,726	\$ 6,835,099	\$ 2,356,343	\$ 9,291,443
				\$ 548,175	\$ 3,582,324	\$ 4,130,499

References:

Column (A): Company Schedule C-1
Column (B): Schedule GWB 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29, 34 and 37
Column (E): Column (C) + Column (D)

ARIZONA-AMERICAN WATER COMPANY - ANTHEM WATER

Docket No. WS-01303A-09-0343

Test Year Ended December 31, 2008

Schedule GWB-11

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Purchased Power ADJ #1 GWB-12	[C] Bad Debts ADJ #2 GWB-13	[D] Depreciation Exp. ADJ #3 GWB-14	[E] Income Taxes ADJ #4 GWB-15	[F] Rate Case Exp ADJ #5 GWB-16	[G] STAFF ADJUSTED
1								
2	Wastewater Revenues	\$ 7,210,624	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,210,624
3	Other Wastewater Revenues	272,650	-	-	-	-	-	272,650
4	Other	-	-	-	-	-	-	-
5	Total Operating Revenues	\$ 7,483,274	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,483,274
6								
7	Labor	\$ 754,087	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 754,087
8	Purchased Water	625,435	-	-	-	-	-	625,435
9	Fuel & Power	1,259,637	83,883	-	-	-	-	1,343,521
10	Chemicals	103,351	-	-	-	-	-	103,351
11	Waste Disposal	1,933	-	-	-	-	-	1,933
12	Management Fees	1,158,078	-	-	-	-	-	1,158,078
13	Group Insurance	208,326	-	-	-	-	-	209,326
14	Pensions	105,808	-	-	-	-	-	105,808
15	Regulatory Expense	64,489	-	-	-	-	-	51,989
16	Insurance Other Than Group	71,553	-	-	-	-	(12,500)	71,553
17	Customer Accounting	183,101	-	(33,363)	-	-	-	149,738
18	Rents	33,826	-	-	-	-	-	33,826
19	General Office Expense	60,044	-	-	-	-	-	60,044
20	Miscellaneous	229,300	-	-	-	-	-	229,300
21	Maintenance Expense	140,803	-	-	-	-	-	140,803
22	Depreciation & Amortization	2,399,893	-	-	(94,116)	-	-	2,305,776
23	General Taxes-Property	292,953	-	-	-	-	-	292,953
24	General Taxes-Other	34,882	-	-	-	-	-	34,882
25	Income Taxes	(759,675)	-	-	-	22,370	-	(737,305)
26	Total Operating Expenses	\$ 6,968,825	\$ 83,883	\$ (33,363)	\$ (94,116)	\$ 22,370	\$ (12,500)	\$ 6,935,099
27	Operating Income (Loss)	\$ 514,449	\$ (83,883)	\$ 33,363	\$ 94,116	\$ (22,370)	\$ 12,500	\$ 548,175

References:

Column (A): Company Schedule C-1

ARIZONA-AMERICAN WATER COMPANY - ANTHEM WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-12

OPERATING INCOME ADJUSTMENT #1 - POWER EXPENSE

<u>LINE</u> <u>NO.</u>	<u>DESCRIPTION</u>	<u>[A]</u> <u>COMPANY</u> <u>PROPOSED</u>	<u>[B]</u> <u>STAFF</u> <u>ADJUSTMENTS</u>	<u>[C]</u> <u>STAFF</u> <u>RECOMMENDED</u>
	Total Adjusted Test Year Fuel & Power Expense	\$1,259,637	\$83,883	\$1,343,521

Column (A): Co. Application Page C-2, Page 9
Column (B): Testimony GWB
Column (C): Column (A) + Column (B)

OPERATING INCOME ADJUSTMENT #2 - BAD DEBT EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Total Uncollectible Accounts	\$ 1,152,299		
2	Uncollectible Accounts- Miscellaneous Invoices	\$ (361,154)		
3	Net Used in Company calculation	\$ 791,145		
4	Allocation Percentage-	8.50%		
5	Bad Debts included in Cust. Accounting	\$ 67,224		
6				
7	Staff Test Year Revenues			\$ 7,483,274
8	3 year average Bad Debt Exp. Rate, Per Co.			0.452%
9	Staff Recommended Bad Debt Exp			\$ 33,861
10				
11	Adjustment		<u>\$(33,363)</u>	

References:

Column [A], Company Workpapers
Column [B]: Col. [C], line 9, less Col [A], line 5
and Testimony GWB.
Column (C): Line 8, Per Company's Workpapers
Column (C): Line 9 Staff's recommended Bad
Debt Expense, based on 3 year average
loss history times Staff's Test Year Revenues

OPERATING ADJUSTMENT #3- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	[B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1		<u>PLANT IN SERVICE:</u>			
2	301000	Organization	-	0.00%	-
3	302000	Franchises	4,719,239	0.00%	-
4	303200	Land & Land Rights SS	6,014,990	0.00%	-
5	303300	Land & Land Rights P	20,000	0.00%	-
6	303400	Land & Land Rights	-	0.00%	-
7	303500	Land & Land Rights TD	-	0.00%	-
8	303600	Land & Land Rights AG	-	0.00%	-
9	304100	Struct & Imp SS	4,724,837	2.50%	118,121
10	304200	Struct & Imp P	2,827,247	1.87%	47,215
11	304300	Struct & Imp WT	1,038,209	1.87%	17,305
12	304400	Struct & Imp TD	112,667	1.87%	1,882
13	304600	Struct & Imp Offices	110,668	1.87%	1,848
14	304800	Struct & Imp Misc	-	0.00%	-
15	305000	Collect & Impounding	305,278	2.50%	7,632
16	306000	Lake, River & Other Intakes	405,221	2.50%	10,131
17	307000	Wells & Springs	92,902	2.52%	2,341
18	308000	Infiltration Galleries & Tunnels	245,768	2.00%	4,915
19	310100	Power Generation Equip Other	-	4.42%	-
20	311200	Pump Equip Electric	11,714,674	4.42%	517,789
21	311300	Pump Equip Diesel	-	4.42%	-
22	311500	Pump Equip Other	10,327	4.42%	456
23	320100	WT Equip Non-Media	10,975,199	7.06%	774,849
24	320200	WT Equip Filter Media	824,366	5.00%	41,218
25	330000	Dist Reservoirs & Standpipe	4,290,367	1.87%	71,649
26	331001	TD Mains Not Classified by Size	3,298,808	1.53%	50,472
27	331100	TD Mains 4in & Less	15,496,418	1.53%	237,095
28	331200	TD Mains 6in to 8in	7,782,150	1.53%	119,067
29	331300	TD Mains 10in to 16in	4,502,911	1.53%	68,895
30	333000	Services	2,018,339	2.48%	50,055
31	334100	Meters	839,713	6.67%	56,009
32	334200	Meter Installations	353,074	2.51%	8,862
33	334300	Meter Vaults	14,599	2.51%	366
34	335000	Hydrants	2,003,910	2.00%	40,078
35	339100	Other P/E Intangible	-	-	-
36	339500	Other P/E TD	-	-	-
37	340100	Office Furniture & Equip	160,631	4.55%	7,309
38	340200	Comp & Periph Equip	24,847	10.00%	2,485
39	341100	Trans Equip Lt Duty Trks	125,754	20.00%	25,151
40	341200	Trans Equip Hvy Duty Trks	60,218	15.00%	9,033
41	341300	Transportation Equipment - Other	-	20.00%	-
42	341400	Trans Equip Other	17,286	16.67%	2,882
43	342000	Stores Equipment	-	0.00%	-
44	343000	Tools, Shop, Garage Equip	30,146	4.14%	1,248
45	344000	Laboratory Equipment	118,788	3.71%	4,407
46	345000	Power Operated Equipment	4,719	5.14%	243
47	346100	Comm Equip Non-Telephone	137,719	10.28%	14,158
48	346190	Remote Control & Instrumentation	9,990	9.76%	972
49	346200	Comm Equip Telephone	22,846	9.76%	2,230
50	346300	Comm Equip Other	12,107	4.93%	597
51	347000	Miscellaneous Equipment	4	6.18%	0
52			-	-	-
53		Allocated from Corporate	-	-	-
54	303600	Land & Land Rights AG	-	0.00%	-
55	304510	Struct & Imp AG Cap Lease	-	-	-
56	304600	Struct & Imp Offices	-	-	-
57	304800	Struct & Imp Misc	-	-	-
58	304620	Struct & Imp Leasehold	10,933	14.20%	1,552
59	331001	Mains	-	-	-
60	339600	Other P/E CPS	2,856	3.30%	94
61	340100	Office Furniture & Equip	63,745	4.04%	2,575
62	340200	Comp & Periph Equip	27,888	15.89%	4,400
63	340300	Computer Software	100,535	37.71%	37,912
64	340330	Comp Software Other	2,585	37.71%	975
65	340500	Other Office Equipment	-	-	-
66	341100	Trans Equip Lt Duty Trks	-	-	-
67	343000	Tools, Shop, Garage Equip	-	-	-
68	344000	Laboratory Equipment	-	-	-
69	345000	Power Operated Equipment	-	-	-
70	346100	Comm Equip Non-Telephone	10,287	9.76%	1,004
71	346200	Comm Equip Telephone	793	9.76%	77
72	346300	Comm Equip Other	271	7.91%	21
73	347000	Misc Equipment	-	-	-
74			-	-	-
75		Phoenix Interconnect	5,000,000	2.50%	125,000
76		Total Plant in Service	90,684,602		2,492,574
77		Less Non Depreciable Plant			
78	301000	Organization	-	0.00%	-
79	302000	Franchises	4,719,239	0.00%	-
80	303200	Land & Land Rights SS	6,014,990	0.00%	-
81	303300	Land & Land Rights P	20,000	0.00%	-
82		Net Depreciable Plant and Depreciation Amounts	\$ 79,930,373		\$ 2,492,574
83		Composite Depreciation Rate		3.12%	
84		Less			
85		Amortization of Regulatory CIAC at Settlement Rate			107,543
86		Amortization of CIAC at Composite Rate	\$ 2,541,488		\$ 79,255
87		Staff Recommended Depreciation Expense			\$ 2,305,776
88		Company Proposed Depreciation Expense			\$ 2,399,893
89		Staff Adjustment			\$ (94,116)

References:	
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

ARIZONA-AMERICAN WATER COMPANY - ANTHEM WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-15

OPERATING INCOME ADJUSTMENT #4 - INCOME TAXES

LINE ACCT NO. NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Income Taxes	<u>\$ (759,675)</u>	<u>\$ 22,370</u>	<u>\$ (737,305)</u>

References:

Column (A), Company Schedule C-2
Column (B): Testimony GWB
Column (C): Column (A) + Column (B)

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-16

OPERATING INCOME ADJUSTMENT #5 - RATE CASE EXPENSE

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>[A] COMPANY PROPOSED</u>	<u>[B] STAFF ADJUSTMENTS</u>	<u>[C] STAFF RECOMMENDED</u>
1	RATE CASE EXPENSE	<u>\$ 64,489</u>	<u>\$ (12,500)</u>	<u>\$ 51,989</u>

References:

Column (A), Company Schedule C-2

Column (B): Testimony GWB

Column (C): Column (A) + Column (B)

OPERATING INCOME PROPERTY TAX EXPENSE GRCF COMPONENT

LINE NO.	DESCRIPTION	[A]	[B]
		STAFF AS ADJUSTED	STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	\$ 7,483,274	\$ 7,483,274
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	14,966,548	14,966,548
4	Staff Recommended Revenue	7,483,274	13,421,942
5	Subtotal (Line 4 + Line 5)	22,449,822	28,388,490
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	7,483,274	9,462,830
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	14,966,548	18,925,660
10	Plus: 10% of CWIP - 2005	4,586	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	14,971,134	18,939,114
13	Assessment Ratio	22.0%	22.0%
14	Assessment Value (Line 12 * Line 13)	3,293,649	4,166,605
15	Composite Property Tax Rate	8.89%	8.89%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	\$ 292,953	
17	Company Proposed Property Tax	\$ 292,953	
18	Staff Test Year Adjustment (Line 16 - Line 17)	\$ 0	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		\$ 370,598
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		\$ 292,953
21	Increase in Property Tax Due to Increase in Revenue Requirement		\$ 77,645
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		\$ 77,645
23	Increase in Revenue Requirement		\$ 5,938,668
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.30745%

REFERENCES:

Line 15: Composite Tax Rate, per Company
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER

Docket No. WS-01303A-09-0343

Test Year Ended December 31, 2008

DIRECT TESTIMONY OF GERALD BECKER

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ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	\$ 28,186,062	\$ 28,186,062	\$ 27,953,979	\$ 27,953,979
2	Adjusted Operating Income (Loss)	\$ 861,084	\$ 861,084	\$ 787,181	\$ 787,181
3	Current Rate of Return (L2 / L1)	3.06%	3.06%	2.82%	2.82%
4	Required Rate of Return	8.53%	8.53%	7.20%	7.20%
5	Required Operating Income (L4 * L1)	\$ 2,404,271	\$ 2,404,271	\$ 2,012,686	\$ 2,012,686
6	Operating Income Deficiency (L5 - L2)	\$ 1,543,187	\$ 1,543,187	\$ 1,225,505	\$ 1,225,505
7	Gross Revenue Conversion Factor	1.6402	1.6402	1.6402	1.6402
8	Required Revenue Increase (L7 * L6)	\$ 2,531,130	\$ 2,531,130	\$ 2,010,087	\$ 2,010,087
9	Adjusted Test Year Revenue	\$ 9,283,101	\$ 9,283,101	\$ 9,283,101	\$ 9,283,101
10	Proposed Annual Revenue (L8 + L9)	\$ 11,814,231	\$ 11,814,231	\$ 11,293,188	\$ 11,293,188
11	Required Increase in Revenue (%)	27.27%	27.27%	21.65%	21.65%
12	Rate of Return on Common Equity (%)	12.25%	12.25%	10.20%	10.20%

References:

Column (A): Company Schedule A-1

Column (B): Company Schedule A-1

Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)
<u>Calculation of Gross Revenue Conversion Factor:</u>				
1	Revenue	100.0000%		
2	Uncollectible Factor (Line 11)	0.0921%		
3	Revenues (L1 - L2)	99.9079%		
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	38.9401%		
5	Subtotal (L3 - L4)	60.9678%		
6	Revenue Conversion Factor (L1 / L5)	1.640211		
<u>Calculation of Uncollectible Factor:</u>				
7	Unity	100.0000%		
8	Combined Federal and State Tax Rate (Line 17)	38.5989%		
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%		
10	Uncollectible Rate	0.1500%		
11	Uncollectible Factor (L9 * L10)		0.0921%	
<u>Calculation of Effective Tax Rate:</u>				
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%		
13	Arizona State Income Tax Rate	6.9680%		
14	Federal Taxable Income (L12 - L13)	93.0320%		
15	Applicable Federal Income Tax Rate (Line 44)	34.0000%		
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%		
17	Combined Federal and State Income Tax Rate (L13 + L16)		38.5989%	
<u>Calculation of Effective Property Tax Factor</u>				
18	Unity	100.0000%		
19	Combined Federal and State Income Tax Rate (L17)	38.5989%		
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%		
21	Property Tax Factor (GWB-17, L24)	0.5558%		
22	Effective Property Tax Factor (L20*L21)		0.3413%	
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			38.9401%

24	Required Operating Income (Schedule GWB-1, Line 5)	\$	2,012,686	
25	Adjusted Test Year Operating Income (Loss) (Schedule GWB-10, Line 42)	\$	787,181	
26	Required Increase in Operating Income (L24 - L25)			\$ 1,225,505
27	Income Taxes on Recommended Revenue (Col. (F), L52)	\$	738,060	
28	Income Taxes on Test Year Revenue (Col. (C), L52)	\$	(32,336)	
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)			\$ 770,395
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	\$	11,293,188	
31	Uncollectible Rate (Line 10)		0.1500%	
32	Uncollectible Expense on Recommended Revenue (L30 * L31)	\$	16,940	
33	Adjusted Test Year Uncollectible Expense	\$	13,925	
34	Required Increase in Revenue to Provide for Uncollectible Exp.			\$ 3,015
35	Property Tax with Recommended Revenue (GWB-17, Line 20)	\$	167,246	
36	Property Tax on Test Year Revenue (GWB-17, Col A, L17)	\$	156,074	
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)			\$ 11,172
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)			\$ 2,010,087

Calculation of Income Tax:

39	Revenue (Sch GWB-9, Col.(C) L5, GWB-1, Col. (D), L9)	\$	9,283,101
40	Operating Expenses Excluding Income Taxes	\$	8,528,255
41	Synchronized Interest (L52)	\$	838,619
42	Arizona Taxable Income (L39 - L40 - L41)	\$	(83,774)
43	Arizona State Income Tax Rate		6.9680%
44	Arizona Income Tax (L42 x L43)	\$	(5,837)
45	Federal Taxable Income (L42 - L44)	\$	(77,936)
46	Federal Tax @ 34%	\$	(26,498)
47	Total Federal Income Tax	\$	(26,498)
48	Combined Federal and State Income Tax (L43 + L47)	\$	(32,336)

50 Effective Tax Rate

Calculation of Interest Synchronization:

51	Rate Base (Schedule GWB-3, Col. (C), Line 18)	
52	Weighted Average Cost of Debt	
53	Synchronized Interest (L50 X L51)	

(A)	(B)	(C)
Test Year Sun City Water		Staff Recommended Sun City Water
\$ 9,283,101		\$ 11,293,188
\$ 8,528,255		\$ 8,542,442
\$ 838,619		\$ 838,619
\$ (83,774)		\$ 1,912,127
6.9680%		6.9680%
\$ (5,837)		\$ 133,237
\$ (77,936)		\$ 1,778,890
\$ (26,498)		\$ 604,822
\$ (26,498)		\$ 604,822
\$ (32,336)		\$ 738,059

N/A
\$ 27,953,979
3.0000%
\$ 838,619

RATE BASE - ORIGINAL COST

LINE NO.	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1 Plant in Service	\$ 63,616,417	\$ (149,497)	\$ 63,466,920
2 Less: Accumulated Depreciation	18,973,897	(22,008)	18,951,889
3 Net Plant in Service	<u>\$ 44,642,520</u>	<u>\$ (127,489)</u>	<u>\$ 44,515,031</u>
<u>LESS:</u>			
4 Contributions in Aid of Construction (CIAC)	\$ 13,194,724	\$ 38,991	\$ 13,233,715
5 Less: Accumulated Amortization	15,011	-	15,011
6 Net CIAC	<u>13,179,713</u>	<u>38,991</u>	<u>13,218,704</u>
7 Advances in Aid of Construction (AIAC)	5,860,651	-	5,860,651
8 Imputed Reg AIAC	-	-	-
9 Imputed Reg CIAC	342,458	-	342,458
10 Accumulated Deferred Income Tax Credits	-	-	-
Customer Meter Deposits	2,450	-	2,450
<u>ADD:</u>			
11 Accumulated Deferred Income Tax Debits	1,904,817	(49,151)	1,855,666
12 Cash Working Capital	416,111	(16,452)	399,659
13 Prepayments	118,894	-	118,894
14 Supplies Inventory	51,086	-	51,086
15 Projected Capital Expenditures	-	-	-
16 Deferred Debits	437,906	-	437,906
17 Purchase Wastewater Treatment Charges	-	-	-
18 Original Cost Rate Base	<u>\$ 28,186,062</u>	<u>\$ (232,083)</u>	<u>\$ 27,953,979</u>

References:

Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJ #1 GWB-5	(C) ADJ #2 GWB-6	(D) ADJ #3 GWB-7&8	(E) ADJ #4 GWB-9	(F) STAFF ADJUSTED
1	301000	Organization	\$ 471					\$ 471
2	302000	Franchises	-					-
3	303200	Land & Land Rights SE	180,023					180,023
4	303300	Land & Land Rights P	8,456					8,456
5	303500	Land & Land Rights TD	10,493					10,493
6	303600	Land & Land Rights AG	2,125					2,125
7	304100	Struct & Imp SE	3,880,282					3,880,282
8	304200	Struct & Imp P	456,858					456,858
9	304300	Struct & Imp WT	126,815					126,815
10	304400	Struct & Imp TD	34,182					34,182
11	304500	Struct & Imp AG	272,321					272,321
12	304600	Struct & Imp Office	37,340					37,340
13	304800	Struct & Imp Misc	1,386,988					1,386,988
14	305000	Collect & Impounding	314					314
15	307000	Wells & Springs	5,860,450					5,860,450
16	309000	Supply Mains	(70)					(70)
17	310000	Power Generation Equip	148,309					148,309
18	310100	Power Generation Equip Other	-					-
19	311200	Pump Equip Electric	10,186,725					10,186,725
20	311300	Pump Equip Diesel	213,446					213,446
21	311400	Pump Equip Hydraulic	16,219					16,219
22	311500	Pump Equip Other	142,073					142,073
23	320100	WT Equip Non-Media	407,001					407,001
24	330000	Dist Reservoirs & Standpipes	1,477,247					1,477,247
25	331001	TD Mains Not Classified by Size	6,804,111					6,804,111
26	331100	TD Mains 4in & Less	12,507,918					12,507,918
27	331200	TD Mains 6in to 36in	2,266,442					2,266,442
28	331300	TD Mains 10in to 18in	89,361					89,361
29	331400	TD Mains 18in & Grtr	13,489					13,489
30	332000	Services	5,875,584					5,875,584
31	334100	Meters	3,378,717					3,378,717
32	334200	Meter Installations	582,322					582,322
33	335000	Hydrants	2,270,400					2,270,400
34	338500	Other P/E TD	523					523
35	340100	Office Furniture & Equip	801,216					801,216
36	340200	Comp & Periph Equip	305,121					305,121
37	340300	Computer Software	26,335					26,335
38	340310	Computer Software	9,105					9,105
39	340320	Computer Software Custom	7,377					7,377
40	340500	Other Office Equipment	3,854					3,854
41	341100	Trans Equip Lt Duty Trks	1,095,694					1,095,694
42	341200	Trans Equip Hvy Duty Trks	23,777					23,777
43	341400	Trans Equip Other	8,233					8,233
44	342000	Stores Equipment	20,038					20,038
45	343000	Tools, Shop, Garage Equip	269,034					269,034
46	344000	Laboratory Equipment	9,560					9,560
47	345000	Power Operated Equipment	151,899					151,899
48	346100	Comm Equip Non-Telephone	221,454					221,454
49	346190	Remote Control & Instrument	17,756					17,756
50	346200	Comm Equip Telephone	7,308					7,308
51	346300	Comm Equip Other	174,787					174,787
52		District Subtotal	61,408,451					61,408,451
53			-					-
54		Allocated from Corporate	-					-
55	303600	Land & Land Rights AG	-					-
56	304510	Struct & Imp AG Cap Lease	-					-
57	304600	Struct & Imp Office	-					-
58	304800	Struct & Imp Misc	-					-
59	304620	Struct & Imp Leasehold	28,920					28,920
60	331001	Mains	-					-
61	339600	Other P/E CPS	7,553					7,553
62	340100	Office Furniture & Equip	168,625					168,625
63	340200	Comp & Periph Equip	73,243					73,243
64	340300	Computer Software	265,948					265,948
65	340330	Comp Software Other	6,838					6,838
66	340500	Other Office Equipment	-					-
67	341100	Trans Equip Lt Duty Trks	-					-
68	343000	Tools, Shop, Garage Equip	-					-
69	344000	Laboratory Equipment	-					-
70	345000	Power Operated Equipment	-					-
71	346100	Comm Equip Non-Telephone	27,213					27,213
72	346200	Comm Equip Telephone	2,098					2,098
73	346300	Comm Equip Other	717					717
74	347000	Misc Equipment	-					-
75	348000	WV TD Equip Aux Eff Trmt	-					-
76	349000	WV Tool Shop & Garage Equip	-					-
77		Corp Allocations Subtotal	581,157					581,157
78			-					-
79		Post Test Year Plant	-					-
80		Well 5.1:	-					-
81	304100	Struct & Imp Supply	52,719					52,719
82	307000	Wells & Springs	580,171					580,171
83	309000	Supply Main	46,550					46,550
84	311200	Pumping Equipment	423,724					423,724
85	320100	WT Equip Non-Media	14,214					14,214
86	347000	Misc Equipment	5,807					5,807
87			1,123,185					1,123,185
88			-					-
89		Well 6.4 Rehabilitation	-					-
90	304100	Struct & Imp Supply	1,830					1,830
91	307000	Wells & Springs	182,268					182,268
92	309000	Supply Main	1,220					1,220
93	311200	Pumping Equipment	294,867					294,867
94	320100	WT Equip Non-Media	12,681					12,681
95	334100	TD Mains 18in & Grtr	8,758					8,758
96			502,625					502,625
97			-					-
98		Less Youngtown Plant	-	(149,497)				(149,497)
99			-					-
100		Total Plant In Service	63,616,417	(149,497)	-	-	-	63,466,920
101			-					-
102		Accumulated Depreciation	18,973,897	(22,008)	-	-	-	18,951,889
103		Net Plant In Service	\$ 44,642,520	\$ (127,489)	\$ -	\$ -	\$ -	\$ 44,515,031
104			-					-
105		LESS:	-					-
106		Contributions in Aid of Construction (CIAC)	\$ 13,194,724	-	-	\$ -	38,961	13,233,715
107		Less: Accumulated Amortization	15,011	-	-	-	-	15,011
108		Net CIAC (L63 - L64)	13,179,713	-	-	-	38,961	13,218,704
109		Advances in Aid of Construction (AIAIC)	5,860,651	-	-	-	-	5,860,651
110		Imputed Reg Advances	-	-	-	-	-	-
111		Imputed Reg CIAC	342,458	-	-	-	-	342,458
112		Accumulated Deferred Income Tax Credits	-	-	-	-	-	-
113		Customer Meter Deposits	2,450	-	-	-	-	2,450
114		ADD:	-					-
115		Accumulated Deferred Income Tax Debits	1,004,817	(49,151)	-	(16,452)	-	1,855,066
116		Working Capital Allowance	416,111	-	-	-	-	399,659
117		Pumping Power	-	-	-	-	-	-
118		Purchase Wastewater Treatment Charges	-	-	-	-	-	-
119		Material and Supplies Inventory	51,086	-	-	-	-	51,086
120		Prepayments	118,894	-	-	-	-	118,894
121		Projected Capital Expenditures	-	-	-	-	-	-
122		Deferred Debits	437,906	-	-	-	-	437,906
123		Original Cost Rate Base	\$ 26,186,062	\$ (127,489)	\$ (49,151)	\$ (16,452)	\$ (38,961)	\$ 27,953,979

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-5

RATE BASE ADJUSTMENT #1 PLANT AND ACCUMULATED DEPRECIATION

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	361.20	Youngtown Plant	149,497	(148,497)	-
		Acc Deprec. Youngtown Plant Acc Dep.	22,008	(22,008)	-

References:

Column [A]: Amounts included in plant balances per filing and previous cases
Column (B): Per Testimony GWB

RATE BASE ADJUSTMENT #2 - ACCUMULATED DEFERRED INCOME TAXES

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED		[B] STAFF ADJUSTMENTS		[C] STAFF AS ADJUSTED	
1	Beginning Balance Per Decision No. 67093	\$	13,025,093	\$	(336,093)	\$	12,689,000
2	Allocation Factor		14.62%		14.62%		14.62%
3	Allocation to Sun City		1,904,817		(49,151)		1,855,666

REFERENCES:

Columns [A], Line 1: Amounts used by Co as basis for allocation

Column [A], [B] & [C], Line 2: Allocation rate to this system

Column [C], Line 1: Allocable amount per audited financial statements times allocation rate

Column [A], [B] & [C], Line 3: Calculation of allocated amounts

RATE BASE ADJUSTMENT #3 - WORKING CAPITAL PER COMPANY

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] COMPANY ADJUSTMENTS	[C] COMPANY AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	\$ 1,225,670	\$ -	1,225,670	12.00	\$ 14,708,039
2	Purchased Water	\$ (0)	-	(0)	(59.03)	\$ 15
3	Fuel & Power	\$ 1,722,582	-	1,722,582	22.09	\$ 38,048,563
4	Chemicals	\$ 37,037	-	37,037	15.09	\$ 558,821
5	Waste disposal	\$ -	-	-	-	\$ -
6	Management Fees	\$ 1,509,322	-	1,509,322	14.77	\$ 22,294,950
7	Group Insurance	\$ 354,396	-	354,396	(13.70)	\$ (4,856,572)
8	Pensions	\$ 251,435	-	251,435	(2.37)	\$ (595,499)
9	Insurance Other Than Group	\$ 93,255	-	93,255	(83.68)	\$ (7,803,989)
10	Customer Accounting	\$ 235,348	-	235,348	10.09	\$ 2,374,500
11	Rents	\$ 60,016	-	60,016	32.82	\$ 1,969,891
12	Miscellaneous	\$ 300,084	-	300,084	25.96	\$ 7,789,394
13	Maintenance Expense	\$ 652,601	-	652,601	23.25	\$ 15,172,456
14	Other Operating Expenses1	\$ 153,833	-	153,833	30.00	\$ 4,614,978
15		\$ -	-	-	-	\$ -
16	Property Taxes	\$ 156,074	-	156,074	190.83	\$ 29,752,393
17	Taxes Other than Income	\$ 94,912	-	94,912	13.35	\$ 1,266,721
18	Income Tax	\$ 979,846	-	979,846	30.13	\$ 29,522,765
19	Interest	\$ 845,582	-	845,582	106.25	\$ 89,843,074
20	Total Operating Expenses	8,671,993	-	8,671,993		244,660,500
21						
22						
23	Expense Lag	Line 20, Col. (E) / Col [C]	28.21			
24	Revenue Lag	Company Workpapers	45.727			
25	Net Lag	Line 24 - 23	17.51			
26	Company Adjusted Expenses	Line 20, Col C	8,671,993			
27	Cash Working Capital	Line 25 * Line 26/365 day	416,111			
28	Company As Filed		416,111			
29	Difference		\$ -			
30						
31	References:					
32	Column [A]: Company Schedule C-1					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Per the Company's Lead Lag Study in this proceeding					
36	Column [E]: Column [C] * Column [D]					

RATE BASE ADJUSTMENT #3 - WORKING CAPITAL PER STAFF

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	\$ 1,225,670		1,225,670	12.00	\$ 14,708,039
2	Purchased Water	\$ (0)		(0)	(59.03)	\$ 15
3	Fuel & Power	\$ 1,722,582		1,722,582	22.09	\$ 38,048,563
4	Chemicals	\$ 37,037	(37,037)	(0.00)	15.09	\$ (0)
5	Waste disposal	\$ -		-	-	\$ -
6	Management Fees	\$ 1,509,322		1,509,322	14.77	\$ 22,294,950
7	Group Insurance	\$ 354,396		354,396	(13.70)	\$ (4,856,572)
8	Pensions	\$ 251,435		251,435	(2.37)	\$ (595,498)
9	Insurance Other Than Group	\$ 93,255		93,255	(83.68)	\$ (7,803,989)
10	Customer Accounting	\$ 235,348	(96,988)	138,360	20.31	\$ 2,809,797
11	Rents	\$ 60,016		60,016	32.82	\$ 1,969,891
12	Miscellaneous	\$ 300,084		300,084	25.96	\$ 7,789,394
13	Maintenance Expense	\$ 652,601		652,601	23.25	\$ 15,172,456
14	Other Operating Expenses ¹	\$ 153,833		153,833	30.00	\$ 4,614,978
15		\$ -		-		\$ -
16	Property Taxes	\$ 156,074		156,074	190.63	\$ 29,752,393
17	Taxes Other than Income	\$ 94,912		94,912	13.35	\$ 1,266,721
18	Income Tax	\$ 979,846		979,846	30.13	\$ 29,522,765
19	Interest	\$ 845,582		845,582	106.25	\$ 89,843,074.23
20	Total Operating Expenses	8,671,993	(134,025)	8,537,967	106	244,536,976
21						
22						
23	Expense Lag	Line 20, Col. (E) / Col (C)	28.64			
24	Revenue Lag	Company Workpapers	45.727			
25	Net Lag	Line 24 - 23	17.09			
26	Staff Adjusted Expenses	Line 20, Col C	8,537,967			
27	Cash Working Capital	Line 25 * Line 26/365 day	399,659			
28	Company As Filed	Co Schedule B-5	416,111			
29	Staff Adjustment (L28-L27)	To GWB-4	(16,452)			
30						
31	References:					
32	Column [A]: Per Company, See Schedule GWB-6, Col [C]					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Per the Company's Lead Lag Study in this proceeding					
36	Column [E]: Column [C] * Column [D]					

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB - 9

RATE BASE ADJUSTMENT #4 - CIAC ASSOCIATED WITH CWIP

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2008	13,194,724	38,991	13,233,715

REFERENCES:

Columns [A]: Company schedules

Column [B]: Column [C] less Column [A]

Column [C]: See testimony GWB

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1	Water Revenues	\$ 9,125,203	\$ -	\$ 9,125,203	\$ 2,010,087	\$ 11,135,290
2	Other Revenues	157,898	-	157,898	-	157,898
3	Other	-	-	-	-	-
4	Total Operating Revenues	\$ 9,283,101	\$ -	\$ 9,283,101	\$ 2,010,087	\$ 11,293,188
5	Labor	\$ 1,225,670	\$ -	\$ 1,225,670	\$ -	\$ 1,225,670
6	Purchased Water	-	-	-	-	-
7	Fuel & Power	1,722,582	228,562	1,951,144	-	1,951,144
8	Chemicals	37,037	(367)	36,671	-	36,671
9	Waste Disposal	-	-	-	-	-
10	Management Fees	1,509,322	-	1,509,322	-	1,509,322
11	Group Insurance	354,396	-	354,396	-	354,396
12	Pensions	251,435	-	251,435	-	251,435
13	Regulatory Expense	75,286	(12,500)	62,786	-	62,786
14	Insurance Other Than Group	93,255	-	93,255	-	93,255
15	Customer Accounting	235,348	(83,158)	152,191	3,015	155,206
16	Rents	60,016	-	60,016	-	60,016
17	General Office Expense	78,546	-	78,546	-	78,546
18	Miscellaneous	300,084	(8,386)	291,698	-	291,698
19	Maintenance Expense	652,601	-	652,601	-	652,601
20	Depreciation & Amortization	1,565,706	(8,167)	1,557,539	-	1,557,539
21	General Taxes-Property	156,074	-	156,074	11,172	167,245
22	General Taxes-Other	94,912	-	94,912	-	94,912
23	Income Taxes	9,746	(42,082)	(32,336)	770,395	738,060
24						
25	Total Operating Expenses	8,422,017	73,903	8,495,920	784,582	9,280,502
26	Operating Income (Loss)	\$ 861,084	\$ (73,903)	\$ 787,181	\$ 1,225,505	\$ 2,012,686

References:

Column (A): Company Schedule C-1
Column (B): Schedule GWB 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29, 34 and 37
Column (E): Column (C) + Column (D)

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) Power Expense ADJ #1 GWB-12	(C) Water Loss ADJ #2 GWB-13	(D) Bad Debt Exp ADJ #3 GWB-14	(E) Water Testing ADJ #4 GWB-15	(F) Depreciation Exp. ADJ #5 GWB-16	(G) Income Taxes ADJ #6 GWB-17	(H) Rate Case ADJ #7 GWB-18	(I) STAFF ADJUSTED
1	Water Revenues	\$ 9,125,203	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,125,203
2	Other Revenues	157,898	-	-	-	-	-	-	-	157,898
3	Other	-	-	-	-	-	-	-	-	-
4	Total Operating Revenues	\$ 9,283,101	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,283,101
5	Labor	\$ 1,225,670	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,225,670
6	Purchased Water	1,722,582	248,073	(19,511)	-	-	-	-	-	1,951,144
7	Fuel & Power	37,037	-	(367)	-	-	-	-	-	36,671
8	Chemicals	-	-	-	-	-	-	-	-	-
9	Waste Disposal	-	-	-	-	-	-	-	-	-
10	Management Fees	1,509,322	-	-	-	-	-	-	-	1,509,322
11	Group Insurance	354,396	-	-	-	-	-	-	-	354,396
12	Pensions	251,435	-	-	-	-	-	-	-	251,435
13	Regulatory Expense	75,286	-	-	-	-	-	-	-	75,286
14	Insurance Other Than Group	93,255	-	-	-	-	-	-	(12,500)	93,255
15	Customer Accounting	235,348	-	-	(83,158)	-	-	-	-	152,191
16	Rents	60,016	-	-	-	-	-	-	-	60,016
17	General Office Expense	78,546	-	-	-	-	-	-	-	78,546
18	Miscellaneous	300,084	-	-	-	(8,386)	-	-	-	291,698
19	Maintenance Expense	652,601	-	-	-	-	-	-	-	652,601
20	Depreciation & Amortization	1,565,708	-	-	-	-	(8,167)	-	-	1,557,539
21	General Taxes-Property	156,074	-	-	-	-	-	-	-	156,074
22	General Taxes-Other	94,912	-	-	-	-	-	-	-	94,912
23	Income Taxes	9,746	-	-	-	-	-	(42,082)	-	(32,336)
24										
25										
26	Total Operating Expenses	\$ 8,422,017	\$ 248,073	\$ (19,878)	\$ (83,158)	\$ (8,386)	\$ (8,167)	\$ (42,082)	\$ (12,500)	\$ 8,495,920
27	Operating Income (Loss)	\$ 861,084	\$ (248,073)	\$ 19,878	\$ 83,158	\$ 8,386	\$ 8,167	\$ 42,082	\$ 12,500	\$ 787,181

References:

Column (A): Company Schedule C-1

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-12

OPERATING INCOME ADJUSTMENT #1 - POWER EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED*
1	Power Expense	<u>\$ 1,722,582</u>	<u>\$ 248,073</u>	<u>\$ 1,970,655</u>

References:

Column (A), Company Schedule C-1

Column (B): Testimony GWB

Column (C): Column (A) + Column (B)

*: Not including Operating Income Adjustment #2 on Schedule GWB-13

OPERATING INCOME ADJUSTMENT #2 - EXCESS WATER LOSS

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Power Expense	\$ 1,722,582		
2	Staff Adjustment #1 (GWB-11)	\$ 248,073		
3	Subtotal Power	\$ 1,970,655	\$ (19,511)	\$ 1,951,144
4				
5	Chemicals Expense	\$ 37,037	\$ (367)	\$ 36,671
6	Disallowance Percent			
7	Adjustment to Chemical Exp.	\$ -		
8	Disallowance Factor:			
9	Acceptable Loss	10.00%		
10	Water Loss, Per Engineering	11.10%		
11	Allowable Percent of Exp.	99.01%	(1+Line 9) / (1+Line 10)	
12	Disallowance Percent	0.99%	1 minus Line 11	

References:

Column (A), Company Schedule C-1

Column (B): Testimony GWB , or Company proposed times disallowance factor Line 12

Column (C): Column (A) + Column (B)

OPERATING INCOME ADJUSTMENT #3 - BAD DEBT EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Total Uncollectible Accounts	\$ 1,152,299		
2	Uncollectible Accounts- Miscellaneous Invoices	\$ (361,154)		
3	Net Used in Company calculation	\$ 791,145		
4	Allocation Percentage-	12.26%		
5	Bad Debts included in Cust. Accounting	\$ 96,988		
6				
7	Staff Test Year Revenues			\$ 9,283,101
8	3 year average Bad Debt Exp. Rate, Per Co.			0.15%
9	Staff Recommended Bad Debt Exp			\$ 13,830
10				
11	Adjustment		<u>\$(83,158)</u>	

References:

Column [A], Company Workpapers
Column [B]: Col. [C], line 9, less Col [A], line 5
and Testimony GWB.
Column (C): Line 8, Per Company's Workpapers
Column (C): Line 9 Staff's recommended Bad
Debt Expense, based on 3 year average
loss history times Staff's Test Year Revenues

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-15

OPERATING INCOME ADJUSTMENT #4 - WATER TESTING EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Water Testing Expense*	\$ 300,084	\$ (8,386)	\$ 291,698

References:

Column (A), Company Schedule C-1

Column (B): Testimony GWB

Column (C): Column (A) + Column (B)

* Included in Miscellaneous Expenses

ARIZONA AMERICAN WATER COMPANY - SUN CITY WATER
 Docket No. WS-012324-00-0043
 Test Year Ended December 31, 2008

Schedule GWB-16

OPERATING INCOME ADJUSTMENT #5- DEPRECIATION EXPENSE

LINE NO.	ACCT NO.	DESCRIPTION	(A) PLANT BALANCE	(B) DEPRECIATION RATE	(C) DEPRECIATION EXPENSE
1		PLANT IN SERVICE			
2	301000	Organization	471	0.00%	-
3	302000	Franchises	-	0.00%	-
4	303200	Land & Land Rights SS	180,023	0.00%	-
5	303300	Land & Land Rights P	8,456	3.33%	282
6	303500	Land & Land Rights TD	10,493	5.00%	525
7	303600	Land & Land Rights AG	2,125	2.00%	43
8	304100	Struct & Imp SS	3,880,262	2.50%	97,007
9	304200	Struct & Imp P	456,858	1.67%	7,630
10	304300	Struct & Imp WT	126,815	1.67%	2,118
11	304400	Struct & Imp TD	34,162	2.00%	683
12	304500	Struct & Imp AG	272,321	3.93%	10,866
13	304600	Struct & Imp Offices	37,340	4.63%	1,729
14	304800	Struct & Imp Misc	1,366,988	1.67%	23,163
15	305000	Collected & Impounding	314	2.50%	8
16	307000	Wells & Springs	5,660,450	2.52%	142,643
17	308000	Supply Mains	(70)	2.00%	(1)
18	310000	Power Generation Equip	148,309	4.42%	6,555
19	310100	Power Generation Equip Other	-	4.42%	-
20	311200	Pump Equip Electric	10,186,725	4.42%	450,293
21	311300	Pump Equip Diesel	213,448	5.00%	10,872
22	311400	Pump Equip Hydraulic	16,219	4.42%	717
23	311500	Pump Equip Other	142,073	6.01%	7,118
24	320100.0	WT Equip Non-Media	407,001	7.06%	28,734
25	330000	Dist Reservoirs & Standpipe	1,477,247	1.67%	24,670
26	331001	TD Mains Not Classified by Size	6,004,111	1.53%	101,043
27	331100	TD Mains 4in & Less	12,507,916	1.53%	191,371
28	331200	TD Mains 6in to 10in	2,266,442	1.53%	34,677
29	331300	TD Mains 10in to 16in	95,381	1.53%	1,520
30	331400	TD Mains 18in & Gtr	13,489	2.00%	270
31	333000	Services	5,878,584	2.48%	145,739
32	334100	Meters	3,378,717	8.67%	226,360
33	334200	Meter Installations	592,322	2.51%	14,867
34	335000	Hydrants	2,270,400	2.00%	45,408
35	336500	Other P/E TD	523	0.00%	-
36	340100	Office Furniture & Equip	801,216	4.59%	36,776
37	340200	Comp & Periph Equip	305,121	10.00%	30,512
38	340300	Computer Software	25,335	25.00%	6,334
39	340310	Computer Software	8,105	25.00%	2,026
40	340325	Computer Software Custom	7,377	25.00%	1,844
41	340500	Other Office Equipment	3,854	7.13%	275
42	341100	Trans Equip LI Duty Trks	1,095,694	20.00%	219,139
43	341200	Trans Equip Hvy Duty Trks	23,777	15.00%	3,567
44	341400	Trans Equip Other	8,233	16.67%	1,372
45	342000	Stores Equipment	20,038	3.91%	783
46	343000	Tools, Shop, Garage Equip	269,034	4.02%	10,815
47	344000	Laboratory Equipment	8,560	3.71%	315
48	345000	Power Operated Equipment	151,896	5.20%	7,899
49	346100	Comm Equip Non-Telephone	221,454	10.30%	22,810
50	346180	Remote Control & Instrument	17,756	10.30%	1,829
51	346200	Comm Equip Telephone	7,306	10.30%	753
52	346300	Comm Equip Other	174,797	4.93%	8,618
53		District Subtotal	61,406,451		
54			-		
55		Allocated from Corporate	-		
56	303600	Land & Land Rights AG	-		
57	304510	Struct & Imp AG Cap Lease	-		
58	304600	Struct & Imp Offices	-		
59	304800	Struct & Imp Misc	-		
60	304620	Struct & Imp Leasehold	28,920	14.28%	4,130
61	331001	Mains	-		
62	339600	Other P/E CPS	7,553	3.30%	249
63	340100	Office Furniture & Equip	168,625	4.04%	6,812
64	340200	Comp & Periph Equip	73,243	15.89%	11,638
65	340300	Computer Software	265,949	37.71%	100,280
66	340330	Comp Software Other	6,839	37.71%	2,578
67	340500	Other Office Equipment	-		
68	341100	Trans Equip LI Duty Trks	-		
69	343000	Tools, Shop, Garage Equip	-		
70	344000	Laboratory Equipment	-		
71	345000	Power Operated Equipment	-		
72	346100	Comm Equip Non-Telephone	27,213	9.78%	2,656
73	346200	Comm Equip Telephone	2,098	9.76%	205
74	346300	Comm Equip Other	717	7.81%	57
75	347000	Misc Equipment	-		
76	380400	WW TD Equip Aux EM Trmt	-		
77	393000	WW Tool Shop & Garage Equip	-		
78	D	Corp Allocations Subtotal	581,157		
79		Youngtown Plant	(149,497)	2.83%	(4,231)
80		Post Test Year Plant	-		
81		Well 5.1	-		
82	304100	Struct & Imp Supply	52,719	2.50%	1,318
83	307000	Wells & Springs	580,171	2.52%	14,620
84	308000	Supply Main	48,550	2.00%	931
85	311200	Pumping Equipment	423,724	4.42%	18,729
86	320100	WT Equip Non-Media	14,214	7.06%	1,004
87	347000	Misc Equipment	5,607		
88		Total Well 5.1	1,123,185		
89			-		
90		Well 6.4 Rehabilitation	-		
91	304100	Struct & Imp Supply	1,830	2.50%	46
92	307000	Wells & Springs	182,268	2.52%	4,593
93	308000	Supply Main	1,220	2.00%	24
94	311200	Pumping Equipment	294,867	4.42%	13,033
95	320100	WT Equip Non-Media	12,681	7.06%	895
96	334100	TD Mains 18in & Gtr	6,758	6.87%	651
97	D	Total Well 6.4	502,625		
98			-		
99		Plant in Service	63,466,920		2,111,852
100					
101					
102		Less: Non Depreciable Plant			
103	301000	Organization	471	0.00%	-
104	302000	Franchises	-	0.00%	-
105	303200	Land & Land Rights SS	180,023	0.00%	-
106		Net Depreciable Plant and Depreciation Amounts	\$ 63,286,427	3.34%	\$ 2,111,852
107		Composite Depreciation Rate			
108		Less:			
109		Amortization of Regulatory CIAC at Settlement Rate			112,708
110		Amerization of CIAC at Composite Rate	\$ 13,233,715		\$ 441,806
111		Staff Recommended Depreciation Expense			\$ 1,567,539
112		Company Proposed Depreciation Expense			\$ 1,565,708
113		Staff Adjustment			\$ (8,167)
114					

References:

Col A Schedule GWB-4
 Col B Proposed Rates per Staff Engineering Report for Non Allocated Plant
 Col C Col (A) times Col (B)

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-17

OPERATING INCOME ADJUSTMENT #6 - INCOME TAXES

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>[A] COMPANY PROPOSED</u>	<u>[B] STAFF ADJUSTMENTS</u>	<u>[C] STAFF RECOMMENDED</u>
1	Income Taxes	<u>\$ 9,746</u>	<u>\$ (42,082)</u>	<u>\$ (32,336)</u>

References:

Column (A), Company Schedule C-2
Column (B): Testimony GWB
Column (C): Column (A) + Column (B)

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-18

OPERATING INCOME ADJUSTMENT #7 - RATE CASE EXPENSE

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>[A] COMPANY PROPOSED</u>	<u>[B] STAFF ADJUSTMENTS</u>	<u>[C] STAFF RECOMMENDED</u>
1	RATE CASE EXPENSE	<u>\$ 75,286</u>	<u>\$ (12,500)</u>	<u>\$ 62,786</u>

References:

Column (A), Company Schedule C-2
Column (B): Testimony GWB
Column (C): Column (A) + Column (B)

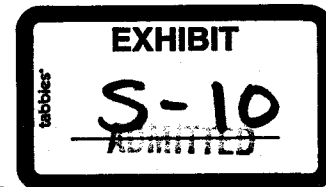
OPERATING INCOME PROPERTY TAX EXPENSE GRCF COMPONENT

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	\$ 9,283,101	\$ 9,283,101
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	18,566,202	18,566,202
4	Staff Adjusted Test Year Revenues - 2007	9,283,101	
5	Staff Recommended Revenue		11,293,188
6	Subtotal (Line 3 + Line 4) & (Line 3 + Line 5)	27,849,303	29,859,390
7	Number of Years	3	3
8	Three Year Average (Line 6 / Line 7)	9,283,101	9,953,130
9	Department of Revenue Multiplier	2	2
10	Revenue Base Value (Line 7 * Line 8)	18,566,202	19,906,260
11	Plus: 10% of CWIP - 2008	151,628	151,628
12	Less: Net Book Value of Licensed Vehicles	-	-
13	Full Cash Value (Line 10 + Line 11 - Line 12)	18,717,830	20,057,888
14	Assessment Ratio	22.0%	22.0%
15	Assessment Value (Line 13 * Line 14)	4,117,923	4,412,735
16	Composite Property Tax Rate	3.79%	3.79%
17	Staff Test Year Adjusted Property Tax Expense (Line 15 * Line 16)	\$ 156,074	
18	Company Proposed Property Tax	\$ 156,074	
19	Staff Test Year Adjustment (Line 16 - Line 17)	\$ 0	
20	Property Tax on Staff Recommended Revenue (Line 15 * Line 16)		\$ 167,246
21	Staff Test Year Adjusted Property Tax Expense (Line 17)		\$ 156,074
22	Increase in Property Tax Due to Increase in Revenue Requirement		\$ 11,172
23	Increase in Property Tax Due to Increase in Revenue Requirement (Line 22)		\$ 11,172
24	Increase in Revenue Requirement		\$ 2,010,087
25	Increase in Property Tax Per Dollar Increase in Revenue (Line 23 / Line 24)		0.55578%

REFERENCES:

0

Line 15: Composite Tax Rate, per Company
Line 17: Company Schedule C-1, Line 27
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8



BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF) DOCKET NO. W-01303A-09-0343
ARIZONA-AMERICAN WATER COMPANY)
FOR DETERMINATION OF THE CURRENT)
FAIR VALUE OF ITS UTILITY PLANT AND)
PROPERTY AND FOR INCREASES IN ITS)
RATES AND CHARGES BASED THEREON)
FOR UTILITY SERVICE BY ITS ANTHEM)
WATER DISTRICT AND ITS SUN CITY)
WATER DISTRICT.)

IN THE MATTER OF THE APPLICATION OF) DOCKET NO. SW-01303A-09-0343
ARIZONA-AMERICAN WATER COMPANY)
FOR DETERMINATION OF THE CURRENT)
FAIR VALUE OF ITS UTILITY PLANT AND)
PROPERTY AND FOR INCREASES IN ITS)
RATES AND CHARGES BASED THEREON)
FOR UTILITY SERVICE BY ITS ANTHEM/)
AGUA FRIA WASTEWATER DISTRICT,)
ITS SUN CITY WASTEWATER DISTRICT, AND)
ITS SUN CITY WEST WASTEWATER DISTRICT)

SURREBUTTAL
TESTIMONY
OF
GERALD BECKER
PUBLIC UTILITIES ANALYST V
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

APRIL 15, 2010

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SCHEDULES

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Rate Base Adjustment #2 – Working Capital Per Company.....	GWB-6
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Sun City Water System:

Revenue Requirement	GWB-1
Gross Revenue Conversion Factor	GWB-2
Rate Base – Original Cost	GWB-3
Summary of Original Cost Rate Base Adjustments.....	GWB-4
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ATTACHMENTS

Reconciliation of Bad Debts to Company Filing.....	Attachment 1
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EXECUTIVE SUMMARY
ARIZONA-AMERICAN WATER COMPANY
DOCKET NOS. W-01303A-09-0343 AND SW-01303A-09-0343

The Surrebuttal Testimony of Staff witness Gerald W. Becker addresses the following issues:

Revenue Requirement – For Anthem Water, Staff recommends a revenue requirement of \$5,930,306, a 79.15 percent increase over test year revenues of \$7,492,744. For Sun City Water, Staff recommends a revenue requirement of \$1,908,222, a 20.56 percent increase over test year revenues of \$9,283,101.

Rate Base – For Anthem Water, Staff recommends a rate base of \$57,270,159, a \$159,865 reduction from the Company's proposed rate base. For Sun City Water, Staff recommends a rate base of \$27,828,924, a \$357,138 reduction from the Company's proposed rate base.

Test Year Operating Income – For Anthem Water, Staff's adjusted test year operating income is \$546,171, a \$31,722 increase over that proposed by the Company. For Sun City Water, Staff's adjusted test year operating income is \$840,282, a \$20,802 decrease from that proposed by the Company.

Response to the Rebuttal Testimony of Mr. Paul G. Townsley

1. Non Account Water Cost Reduction for Sun City Water (only) – Staff disagrees with the Company's rebuttal position not to impute expense reductions for water losses greater than 10 percent.

Staff Response to the Rebuttal Testimony of Ms. Linda J. Gutowski –

2. Cash Working Capital - Subsequent to filing its application, the Company has changed its lead/lag days for Management expenses from a 14.77 day lag to an 11.25 day lead. Staff had agreed with the original lag days but disagrees with the Company's restated lead days.
3. Bad Debt Expense – Staff and the Company continue to disagree on the method for determining a normalized amount of bad debt expense for all of its districts. Staff has revised its method to include normalization of uncollectibles related to miscellaneous invoices. The Company's rebuttal position is erroneous because its normalization method ignores that the actual test year recorded amount includes not only write-offs but also an accrual provision. The Company's rebuttal amount also includes mathematical errors due use of incorrect signs of netted amounts.

Anthem Water: Staff accepts the following rebuttal positions.

4. Customer Annualization - The Company agrees with RUCO's correction to customer annualization. Staff agrees with this adjustment.
5. Depreciation Annualization - The Company agrees with RUCO's correction to depreciation annualization. Staff agrees with this adjustment.
6. Annual Incentive Pay (AIP) - The Company agrees with RUCO's adjustment to AIP. Staff agrees with this adjustment.
7. Stock Compensation - The Company agrees with RUCO's adjustment to Stock Compensation. Staff agrees with this adjustment.
8. Management Fees (AIP) - The Company agrees with RUCO's adjustment to Management Fees for an AIP adjustment. Staff agrees with this adjustment.
9. Other Expense - The Company agrees with RUCO's adjustment to Management Fees for Other Expenses. Staff agrees with this adjustment.
10. Business Development Expenses - The Company agrees with RUCO's adjustment to Management Fees for business development expenses. Staff agrees with this adjustment.
11. Dues and Donations - The Company agrees with RUCO's adjustment to Management Fees for dues and donations. Staff agrees with this adjustment.
12. Pension Expense Annualization - The Company agrees with RUCO's adjustment to pension expense. Staff agrees with this adjustment.

Sun City Water: Staff accepts the following rebuttal positions.

13. Annual Incentive Pay (AIP) - The Company agrees with RUCO's adjustment to AIP. Staff agrees with this adjustment.
14. Stock Compensation - The Company agrees with RUCO's adjustment to Stock Compensation. Staff agrees with this adjustment.
15. Management Fees (AIP) - The Company agrees with RUCO's adjustment to Management Fees for an AIP adjustment. Staff agrees with this adjustment.
16. Other Expense - The Company agrees with RUCO's adjustment to Management Fees for Other Expenses. Staff agrees with this adjustment.
17. Business Development Expenses - The Company agrees with RUCO's adjustment to Management Fees for business development expenses. Staff agrees with this adjustment.
18. Dues and Donations - The Company agrees with RUCO's adjustment to Management Fees for dues and donations. Staff agrees with this adjustment.
19. Pension Expense Annualization - The Company agrees with RUCO's adjustment to pension expense. Staff agrees with this adjustment.

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Gerald Becker. I am a Public Utilities Analyst V employed by the Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Gerald Becker who previously submitted Direct Testimony in this case?

A. Yes, I am.

PURPOSE OF SURREBUTTAL TESTIMONY

Q. What is the purpose of your Surrebuttal Testimony in this proceeding?

A. The purpose of my Surrebuttal Testimony in this proceeding is to respond, on behalf of Staff to the Rebuttal Testimonies of Mr. Paul G. Townsley and Ms. Linda J. Gutowski who represent Arizona-American Water Company Inc. - ("Arizona American" or "Company") for the Anthem and Sun City water districts.

Q. Do you attempt to address every issue raised by the Company in its Rebuttal Testimony?

A. No. I limit my discussion to certain issues as outlined below. My silence on any particular issue raised in the Company's Rebuttal Testimony does not indicate that Staff agrees with the Company's stated Rebuttal position on the issue. I rely on my Direct Testimony unless modified by this Surrebuttal Testimony.

1 **Q. What issues will you address?**

2 A. I address the issues listed below that are discussed in the Rebuttal Testimonies of
3 Company witnesses Mr. Paul G. Townsley and Ms. Linda J. Gutowski. In addition, I am
4 also sponsoring the attached surrebuttal schedules for the Anthem Water and Sun City
5 Water districts.

6
7 Paul G. Townsley:

8
9 1. Non-Account Water Cost Reduction for Sun City Water district

10
11 Linda J. Gutowski:

12
13 Both Anthem Water and Sun City Water districts:

- 14 1. Cash Working Capital – Lead Lag days for Management Expenses
15
16 2. Bad Debt Expense
17

18 Anthem Water: Staff accepts the Company's rebuttal positions on the following:

- 19 3. Customer Annualization
20 4. Depreciation Annualization
21 5. Annual Incentive Pay (AIP)
22 6. Stock Compensation
23 7. Management Fees (AIP)
24 8. Other Expense
25 9. Business Development Expenses
26 10. Dues and Donations
27 11. Pension Expense Annualization
28

29 Sun City Water: Staff accepts the Company's rebuttal positions on the following:

- 30 12. Annual Incentive Pay (AIP)
31 13. Stock Compensation
32 14. Management Fees (AIP)
33 15. Other Expense
34 16. Business Development Expenses
35 17. Dues and Donations
36 18. Pension Expense Annualization

SUMMARY OF RECOMMENDATIONS

Q. Please provide a summary of Staff surrebuttal recommendations.

A. For Anthem Water, Staff recommends a revenue requirement of \$5,930,106, a 79.15 percent increase over test year revenues of \$7,492,744. For Sun City Water, Staff recommends a revenue requirement of \$1,908,222, a 20.56 percent increase over test year revenues of \$9,283,101. For Anthem Water, Staff recommends a rate base of \$57,270,159, a \$159,865 reduction from the Company's proposed rate base. For Sun City Water, Staff recommends a rate base of \$27,828,924, a \$357,138 reduction from the Company's proposed rate base. For Anthem Water, Staff's adjusted test year operating income is \$546,171, a \$31,722 increase over that proposed by the Company. For Sun City Water, Staff's adjusted test year operating income is \$840,282, a \$20,802 decrease from that proposed by the Company.

RESPONSE TO REBUTTAL TESTIMONY OF PAUL G. TOWNSLEY

Expense Adjustments for Non-Account Water in Excess of Ten Percent for the Sun City Water District.

Q. Please describe the treatment proposed by the Company in this filing.

A. The Company rejects Staff's recommendation of a pro rata adjustment to power and chemicals expense for non-account water in excess of ten percent.

Q. Did Staff recommend this treatment in its Direct Testimony?

A. Yes.

Q. Is Staff now in agreement with the Company's position?

A. No.

1 **Q. Please explain.**

2 A. To the extent that a district has non-account water in excess of the allowed threshold of
3 ten percent, the Company's expenses are increased proportionately and represent an unfair
4 burden to the ratepayers, since it is the Company's obligation to maintain non-account
5 water within acceptable standards.

6
7 **Q. What does Staff recommend?**

8 A. Staff continues to recommend adjustments to power and chemical expense for excessive
9 non-account water, as shown in surrebuttal Schedule GWB-13.

10
11 **RESPONSE TO REBUTTAL TESTIMONY OF LINDA J. GUTOWSKI**

12 **Anthem Water and Sun City Water Districts:**

13 *Cash Working Capital Calculation: Lead Days for Management Expenses*

14 **Q. When Staff filed its Direct Testimony, did Staff make any adjustment to the**
15 **Company's lag days for Management Expenses in its calculation of cash working**
16 **capital?**

17 A. No.

18
19 **Q. Please explain.**

20 A. In its filing, the Company used 14.77 lag days for Management Expenses. Based on the
21 expenses intended to be covered by Management Expenses, Staff recommended that 14.77
22 lag days would be a reasonable number of lag days for this item.

23
24 **Q. Did the Company change its position in its Rebuttal Testimony?**

25 A. Yes. The Company now claims a *lead* of 11.25 days for Management Expenses.

1 **Q. What are the reasons that the Company changed its number of lead/lag days for**
2 **Management Expenses?**

3 A. The Company uses a shared services model for certain items, and based on the agreement
4 between the Company and its affiliate, the Company pays for certain expenses one month
5 in advance.

6
7 **Q. Does the Company offer other reasons to support its lead days for Management**
8 **Expenses?**

9 A. Yes. The Company states that the calculation “is the same kind of lead days used in the
10 2008 Working Capital calculation that was approved as part of Decision 71410.”¹

11
12 **Q. Does Staff agree with these reasons?**

13 A. No.

14
15 **Q. Please explain.**

16 A. Staff does not believe that lead/lag days should be based on internal agreements made
17 between the Company and its parent or other affiliate. Instead, lead/lag days should be
18 calculated on the best assessment of an entity’s actual experience regarding the transfer of
19 cash. Further, the use of an internal agreement to calculate lead/lag days may result in a
20 situation where an unregulated affiliate may expect payments even sooner than one month
21 in advance, and expect the ratepayers to support this internal circumstance in its cash
22 working capital calculation.

¹ Rebuttal Testimony of Linda J. Gutowski, page 11 of 21, lines 6-7.

1 **Q. Does Staff have any comment regarding the use of the lead/lag days approved in**
2 **Decision No. 71410? Please explain.**

3 A. Staff reviewed Decision No. 71410 and notes that this decision does not approve a lead of
4 11.25 days for Management Expenses. Instead, this decision approves a lead of 3.88 days
5 for Management Expenses.
6

7 **Q. What does Staff recommend?**

8 A. Staff recommends that the effect(s) of Management Expenses be removed from the
9 computation of cash working capital. Staff disagrees with the lead of 3.88 days approved
10 in Decision No. 71410 because it was not based upon a lead/lag study of the affiliate and
11 reflects the prepayment of the following month's expenses. In the absence of a lead/lag
12 study to determine the payment pattern by the affiliated service provider, Staff has revised
13 its computation of cash working capital to exclude the effects of the 14.77 lag days for
14 Management Expenses as originally requested by the Company, as shown in Anthem
15 Water Surrebuttal Schedule GWB-7 and Sun City Water Surrebuttal Schedule GWB-8
16

17 *Bad Debt Expense- Anthem Water and Sun City Water*

18 **Q. Please describe the similarities and differences between the Company's rebuttal**
19 **position and Staff's position in this testimony.**

20 A. Although both the Company and Staff agree that Bad Debt Expense should be normalized
21 based on the Company's three-year experience, the Company and Staff are unable to agree
22 on the actual amount of Bad Debt Expense that was included in the Company's original
23 application. This difference, in turn, results in different adjustments to Bad Debt Expense
24 for both systems.

1 **Q. Please explain the reasons that there is disagreement of the amount of Bad Debt**
2 **Expense included in the Company's application?**

3 A. First, the Company's application incorporates Bad Debt Expense into the Company's total
4 Customer Accounting Expense, so the Bad Debt Expense itself is not readily discernible
5 from the schedules filed with the application. One must review the supporting
6 documentation to determine the amount of Bad Debt Expense included in the Customer
7 Accounting Expense. Secondly, the Company's application as filed reflects the use of a
8 four-factor allocation applied to both the actual write-offs and an accrued provision,
9 instead of using each district's respective loss history.

10
11 **Q. What is reflected in the Company's rebuttal testimony for this amount?**

12 A. The Company calculates the Bad Debt Expense included in the Customer Accounting
13 Expense based on net write-off's without giving consideration to the accrued provision.

14
15 **Q. Does Staff agree with the Company's position?**

16 A. No.

17
18 **Q. Please explain.**

19 A. The Company's use of the write-off amount only does not yield the amount of expenses
20 included in the Company's test year results because the test year results also include an
21 accrued provision for on-going bad debts. In order to determine the correct adjustment,
22 Staff compared the amount of bad debt expense reflected in the Company proposed test
23 year to the normalized expense based on the Company's three-year history of write-offs.

1 **Q. Please provide Staff's calculation of the amount of Bad Debt Expense included in test**
2 **year expenses.**

3 A. Yes, please see Attachment One. This schedule illustrates the composition of the
4 Company's Customer Accounting Expense by line item including Bad Debt Expenses
5 ("Uncollectibles" and Uncollectibles-MI (Miscellaenous Invoices)). As indicated,
6 Customer Accounting Expenses are mostly comprised of allocations from a shared
7 services center, plus a minor amount recorded locally at each system. Staff recalculated
8 the allocated expense for each line item and then added the amounts recorded directly by
9 each system. The resulting figures reconcile to the Customer Accounting Expense for
10 each system as reported in Schedule C-1 of the Company's application. Therefore, Staff
11 concludes that the calculated amounts for Bad Debt Expense and the corresponding
12 adjustments, as shown in Surrebuttal Schedule GWB-13 for Anthem Water and
13 Surrebuttal Schedule GWB-14 for Sun City Water district, properly reflect the normalized
14 test year expenses for the respective districts.

15
16 **Q. Has Staff's amount changed since Staff filed its Direct Testimony?**

17 A. Yes.

18
19 **Q. Please explain.**

20 A. Staff's calculation changed for two reasons. First, Staff made some minor corrections to
21 the allocation percentages used to recalculate Bad Debt Expense. Second, Staff applied
22 the restated percentages to Uncollectible Accounts only and did not include the
23 Uncollectible Accounts-MI (Miscellaneous Invoices) as was done as part of Staff's Direct
24 Testimony. The second change, exclusion of Uncollectible Accounts-MI (Miscellaneous
25 Invoices), is to reflect the fact that the Uncollectible Accounts-MI (Miscellaneous
26 Invoices) does not contain activity related to the uncollectible portion of the Company's

1 retail sales. Rather, Uncollectible Accounts-MI (Miscellaneous Invoices) is used as a
2 billing and collection clearing account for miscellaneous activity such as damage to
3 company property, and it should not be considered in the calculation of uncollectible
4 amounts associated with ordinary retail sales.

5
6 **Q. Does the Uncollectible Accounts-MI (Miscellaneous Invoices) warrant further**
7 **adjustment? Please explain.**

8 A. Yes. The large credit balance in the Uncollectible Accounts-MI (Miscellaneous Invoices)
9 represents collections of amounts billed in previous periods, and the large fluctuations in
10 the account warrant normalization. A review of the Company workpapers indicates the
11 following activity for this account:

12		
13	2006	\$341,820
14	2007	\$16,584
15	2008	<u>\$(361,154)</u>
16	3 year total	<u>\$(2,750)</u>
17	3 year average	\$(917)
18		

19 The three-year average as shown above is allocated to each district as shown in
20 Surrebuttal Schedules GWB-13 and GWB-14 for Anthem Water and Sun City Water,
21 respectively, and these amounts offset the adjustment for Bad Debt Expense on ordinary
22 activity.

23
24 **Q. Does Staff have other comments?**

25 A. Yes. The Company's methodology is a departure from the two established methodologies
26 for treating uncollectible accounts. The first method is the Direct Charge-Off method

1 where uncollectibles and any associated, subsequent recoveries are recorded directly, or
2 “charged-off,” to Bad Debt Expense. The second method is the Allowance method where
3 a company systematically records expense to Bad Debt Expense with an offset to an
4 Allowance for Doubtful Accounts. Unlike the first method, under this method, the
5 charge-off is then made to the Allowance for Doubtful Accounts rather than to Bad Debt
6 Expense. In the instant case, the Company has adopted a kind of hybrid method whereby
7 its charge-offs, as well as its systematic provision for bad debts, are both reflected in the
8 Bad Debt Expense of Customer Accounting Expense. This practice has created confusion
9 regarding the reasons for and the amounts of Bad Debt Expense.

10
11 **Q. What does Staff recommend?**

12 A. Staff recommends the adjustments to Customer Accounting Expense as shown in Anthem
13 Water Surrebuttal Schedule GWB-13 and Sun City Water Surrebuttal Schedule GWB-14.
14

15 *Other Adjustments*

16 **Q. Is Staff adopting other adjustments reflected in the Company’s Rebuttal Testimony?**

17 A. Yes. On Surrebuttal schedules GWB-11, Anthem adjustments 7 through 14 and Sun City
18 Water adjustments 8 through 14, Staff is reflecting its adoption of adjustments discussed
19 in the Company’s Rebuttal Testimony. Since these items are explained in detail in the
20 Company’s Rebuttal Testimony, Staff is not providing duplicative or further explanation
21 here.
22

23 **Q. Does this conclude your Surrebuttal Testimony?**

24 A. Yes, it does.

ARIZONA-AMERICAN WATER COMPANY - ANTHEM WATER

Docket No. WS-01303A-09-0343

Test Year Ended December 31, 2008

SURREBUTTAL TESTIMONY OF GERALD BECKER

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REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	\$ 57,430,024	\$ 57,430,024	\$ 57,270,159	\$ 57,270,159
2	Adjusted Operating Income (Loss)	\$ 514,449	\$ 514,449	\$ 546,171	\$ 546,171
3	Current Rate of Return (L2 / L1)	0.90%	0.90%	0.95%	0.95%
4	Required Rate of Return	8.53%	8.53%	7.20%	7.20%
5	Required Operating Income (L4 * L1)	\$ 4,898,781	\$ 4,898,781	\$ 4,123,451	\$ 4,123,451
6	Operating Income Deficiency (L5 - L2)	\$ 4,384,332	\$ 4,384,332	\$ 3,577,281	\$ 3,577,281
7	Gross Revenue Conversion Factor	1.6578	1.6578	1.6578	1.6578
8	Required Revenue Increase (L7 * L6)	\$ 7,268,172	\$ 7,268,172	\$ 5,930,306	\$ 5,930,306
9	Adjusted Test Year Revenue	\$ 7,492,744	\$ 7,492,744	\$ 7,492,744	\$ 7,492,744
10	Proposed Annual Revenue (L8 + L9)	\$ 14,760,916	\$ 14,760,916	\$ 13,423,050	\$ 13,423,050
11	Required Increase in Revenue (%)	97.00%	97.00%	79.15%	79.15%
12	Rate of Return on Common Equity (%)	12.25%	12.25%	10.20%	10.20%

References:

Column [A]: Company Schedule A-1 (revised)
Column [B]: Company Schedule A-1 (revised)
Column [C]: Staff Schedules GWB-2, GWB-3, and GWB-10

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)
<u>Calculation of Gross Revenue Conversion Factor:</u>				
1	Revenue	100.0000%		
2	Uncollectible Factor (Line 11)	0.2763%		
3	Revenues (L1 - L2)	99.7237%		
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.4017%		
5	Subtotal (L3 - L4)	60.3220%		
6	Revenue Conversion Factor (L1 / L5)	1.657769		
<u>Calculation of Uncollectible Factor:</u>				
7	Unity	100.0000%		
8	Combined Federal and State Tax Rate (Line 17)	38.5989%		
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%		
10	Uncollectible Rate	0.4500%		
11	Uncollectible Factor (L9 * L10)		0.2763%	
<u>Calculation of Effective Tax Rate:</u>				
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%		
13	Arizona State Income Tax Rate	6.9680%		
14	Federal Taxable Income (L12 - L13)	93.0320%		
15	Applicable Federal Income Tax Rate (Line 44)	34.0000%		
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%		
17	Combined Federal and State Income Tax Rate (L13 + L16)		38.5989%	
<u>Calculation of Effective Property Tax Factor</u>				
18	Unity	100.0000%		
19	Combined Federal and State Income Tax Rate (L17)	38.5989%		
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%		
21	Property Tax Factor (GWB-17, L24)	1.3075%		
22	Effective Property Tax Factor (L20*L21)		0.8028%	
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.4017%

24	Required Operating Income (Schedule GWB-1, Line 5)	\$ 4,123,451		
25	Adjusted Test Year Operating Income (Loss) (Schedule GWB-10, Line 42)	\$ 546,171		
26	Required Increase in Operating Income (L24 - L25)		\$ 3,577,281	
27	Income Taxes on Recommended Revenue (Col. (F), L52)	\$ 1,512,085		
28	Income Taxes on Test Year Revenue (Col. (C), L52)	\$ (736,719)		
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		\$ 2,248,804	
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	\$ 13,423,050		
31	Uncollectible Rate (Line 10)	0.4500%		
32	Uncollectible Expense on Recommended Revenue (L30 * L31)	\$ 60,404		
33	Adjusted Test Year Uncollectible Expense	\$ 33,717		
34	Required Increase in Revenue to Provide for Uncollectible Exp.		\$ 26,686	
35	Property Tax with Recommended Revenue (GWB-17, Line 19)	\$ 370,860		
36	Property Tax on Test Year Revenue (GWB-17, Col A, L16)	\$ 293,324		
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		\$ 77,536	
38	Total Required Increase in Revenue (L26 + L29 + L34+ L37)		\$ 5,930,307	

	(A)	(B)	(C)
	Test Year Anthem Water		Staff Recommended Anthem Water
39	Revenue (Sch GWB-9, Col.(C) L5, GWB-1, Col. (D), L9)	\$ 7,492,744	\$ 13,423,050
40	Operating Expenses Excluding Income Taxes	\$ 7,683,292	\$ 7,787,514
41	Synchronized Interest (L52)	\$ 1,718,105	\$ 1,718,105
42	Arizona Taxable Income (L39 - L40 - L41)	\$ (1,908,653)	\$ 3,917,432
43	Arizona State Income Tax Rate	6.9680%	6.9680%
44	Arizona Income Tax (L42 x L43)	\$ (132,995)	\$ 272,967
45	Federal Taxable Income (L42 - L44)	\$ (1,775,658)	\$ 3,644,466
46	Federal Tax @ 34%	\$ (603,724)	\$ 1,239,118
47	Total Federal Income Tax	\$ (603,724)	\$ 1,239,118
48	Combined Federal and State Income Tax (L43 + L47)	\$ (736,719)	\$ 1,512,085

49 Effective Tax Rate 34.0000%

50	Rate Base (Schedule GWB-3, Col. (C), Line 18)	\$ 57,270,159
51	Weighted Average Cost of Debt	3.0000%
52	Synchronized Interest (L50 X L51)	\$ 1,718,105

ARIZONA-AMERICAN WATER COMPANY - ANTHEM WATER

Docket No. WS-01303A-09-0343

Test Year Ended December 31, 2008

Schedule GWB-3
SURREBUTTAL

RATE BASE - ORIGINAL COST

LINE NO.	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	\$ 90,684,602	\$ 90,684,602
2	Less: Accumulated Depreciation	12,905,766	12,905,766
3	Net Plant in Service	<u>\$ 77,778,836</u>	<u>\$ 77,778,836</u>
<u>LESS:</u>			
4	Contributions in Aid of Construction (CIAC)	\$ 2,511,217	\$ 2,541,488
5	Less: Accumulated Amortization	117,946	117,946
6	Net CIAC	<u>2,393,271</u>	<u>2,423,542</u>
7	Advances in Aid of Construction (AIAC)	18,557,742	18,557,742
8	Imputed Reg AIAC	-	-
9	Imputed Reg CIAC	326,764	326,764
10	Customer Meter Deposits	1,920	1,920
<u>ADD:</u>			
11	Deferred Income Tax Credits (Debits)	720,067	701,487
12	Cash Working Capital	73,130	(37,883)
13	Prepayments	30,693	30,693
14	Supplies Inventory	55,281	55,281
15	Projected Capital Expenditures	-	-
16	Deferred Debits	51,714	51,714
17	Purchase Wastewater Treatment Charges	-	-
18	Original Cost Rate Base	<u>\$ 57,430,024</u>	<u>\$ 57,270,159</u>

References:

Column (A), Company Schedule B-2

Column (B): Schedule GWB-4

Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 GWB-5	[C] ADJ #2 GWB-6	[D] ADJ #3 GWB-7	[E] ADJ #4 GWB-8	[F] STAFF ADJUSTED
		<u>PLANT IN SERVICE:</u>						
1	301000	Organization	-					\$ -
2	302000	Franchises	\$ 4,719,239					\$ 4,719,239
3	303200	Land & Land Rights SS	6,014,990					6,014,990
4	303300	Land & Land Rights P	20,000					20,000
5	303400	Land & Land Rights	-					-
	303500	Land & Land Rights TD	-					-
6	303600	Land & Land Rights AG	-					-
7	304100	Struct & Imp SS	4,724,837					4,724,837
8	304200	Struct & Imp P	2,827,247					2,827,247
9	304300	Struct & Imp WT	1,058,498	(22,289)				1,036,209
10	304400	Struct & Imp TD	112,667					112,667
	304600	Struct & Imp Offices	110,668					110,668
11	304800	Struct & Imp Misc	-					-
12	305000	Collect & Impounding	305,278					305,278
	306000	Lake, River & Other Intakes	405,221					405,221
13	307000	Wells & Springs	92,902					92,902
14	308000	Infiltration Galleries & Tunne	245,768					245,768
15	310100	Power Generation Equip Other	-					-
16	311200	Pump Equip Electric	11,714,674					11,714,674
17	311300	Pump Equip Diesel	-					-
18	311500	Pump Equip Other	10,327					10,327
19	320100	WT Equip Non-Media	10,952,910	22,289				10,975,199
20	320200	WT Equip Filter Media	824,366					824,366
21	330000	Dist Reservoirs & Standpipe	4,290,367					4,290,367
22	331001	TD Mains Not Classified by Size	3,298,808					3,298,808
23	331100	TD Mains 4in & Less	15,496,418					15,496,418
24	331200	TD Mains 6in to 8in	7,782,150					7,782,150
25	331300	TD Mains 10in to 16in	4,502,911					4,502,911
26	333000	Services	2,018,339					2,018,339
27	334100	Meters	839,713					839,713
28	334200	Meter Installations	353,074					353,074
29	334300	Meter Vaults	14,599					14,599
30	335000	Hydrants	2,003,910					2,003,910
31	339100	Other P/E Intangible	-					-
32	339500	Other P/E TD	-					-
33	340100	Office Furniture & Equip	160,631					160,631
34	340200	Comp & Periph Equip	24,847					24,847
35	341100	Trans Equip Lt Duty Trks	125,754					125,754
36	341200	Trans Equip Hvy Duty Trks	60,218					60,218
37	341300	Transportation Equipment - Other	-					-
38	341400	Trans Equip Other	17,286					17,286
39	342000	Stores Equipment	-					-
40	343000	Tools,Shop,Garage Equip	30,146					30,146
41	344000	Laboratory Equipment	118,788					118,788
42	345000	Power Operated Equipment	4,719					4,719
43	346100	Comm Equip Non-Telephone	137,719					137,719
44	346190	Remote Control & Instrumentati	9,960					9,960
45	346200	Comm Equip Telephone	22,846					22,846
46	346300	Comm Equip Other	12,107					12,107
47	347000	Miscellaneous Equipment	4					4
48			-					-
49		Allocated from Corporate	-					-
50	303600	Land & Land Rights AG	-					-
51	304510	Struct & Imp AG Cap Lease	-					-
52	304600	Struct & Imp Offices	-					-
53	304800	Struct & Imp Misc	-					-
54	304620	Struct & Imp Leasehold	10,933					10,933
55	331001	Mains	-					-
56	339600	Other P/E CPS	2,855					2,855
57	340100	Office Furniture & Equip	63,745					63,745
58	340200	Comp & Periph Equip	27,688					27,688
59	340300	Computer Software	100,535					100,535
60	340330	Comp Software Other	2,585					2,585
61	340500	Other Office Equipment	-					-
62	341100	Trans Equip Lt Duty Trks	-					-
63	343000	Tools,Shop,Garage Equip	-					-
64	344000	Laboratory Equipment	-					-
65	345000	Power Operated Equipment	-					-
66	346100	Comm Equip Non-Telephone	10,287					10,287
67	346200	Comm Equip Telephone	793					793
68	346300	Comm Equip Other	271					271
69	347000	Misc Equipment	-					-
70		Phoenix Interconnect	5,000,000					5,000,000
71		Total Plant in Service	90,684,602	-	-	-	-	90,684,602
72		Amortization of Phoenix Interconnect	116,667					116,667
73		Accumulated Depreciation	12,789,099					12,789,099
74		Net Plant in Service (L58 - L 59)	\$ 77,778,836	\$ -	\$ -	\$ -	\$ -	\$ 77,778,836
75								
76		<u>LESS:</u>						
77		Contributions in Aid of Construction (CIAC)	2,511,217		\$ -	\$ -	\$ 30,271	2,541,488
78		Less: Accumulated Amortization	117,946	-	-	-	-	117,946
79		Net CIAC (L63 - L64)	2,393,271	-	-	-	30,271	2,423,542
80		Advances in Aid of Construction (AIAC)	18,557,742	-	-	-	-	18,557,742
81		Imputed Reg Advances	-	-	-	-	-	-
82		Imputed Reg CIAC	326,764	-	-	-	-	326,764
83		Accumulated Deferred Income Tax Credits	-	-	-	-	-	-
84		Customer Meter Deposits	1,920					1,920
85		<u>ADD:</u>						
85		Accumulated Deferred Income Tax (Debits)	720,067			(18,580)		701,487
86		Working Capital Allowance	73,130	-	(111,013)	-	-	(37,883)
87		Pumping Power	-	-	-	-	-	-
88		Purchase Wastewater Treatment Charges	-	-	-	-	-	-
89		Material and Supplies Inventory	55,281	-	-	-	-	55,281
90		Prepayments	30,693	-	-	-	-	30,693
91		Projected Capital Expenditures	-	-	-	-	-	-
92		Deferred Debits	51,714					51,714
93		Original Cost Rate Base	\$ 57,430,024	\$ -	\$ (111,013)	\$ (18,580)	\$ (30,271)	\$ 57,270,159

ARIZONA-AMERICAN WATER COMPANY - ANTHEM WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-5
SURREBUTTAL

RATE BASE ADJUSTMENT #1 - PLANT IN SERVICE

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	304300	Dist Reservoirs & Standpipe Plant	1,058,498	(22,289)	1,036,209
	320100	WT Equip Non-Media	10,952,910	22,289	10,975,199

References:

Column [A]: Amounts included in plant balances per filing.

Column (B): Per Engineering Report

Column (C): Column [A] plus Column [B]

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL PER COMPANY

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] COMPANY ADJUSTMENTS	[C] COMPANY AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	729,935	-	729,935	12.00	8,759,223
2	Purchased Water	625,435	-	625,435	50.92	31,844,918
3	Fuel & Power	1,259,637		1,259,637	22.70	28,588,352
4	Chemicals	103,351		103,351	8.73	901,789
5	Waste Disposal	1,933		1,933	4.55	8,803
6	Management Fees	1,107,843		1,107,843	14.77	16,364,503
7	Group Insurance	209,326		209,326	(13.70)	(2,868,562)
8	Pensions	119,955		119,955	(2.37)	(284,101)
9	Insurance Other Than Group	71,553		71,553	(83.68)	(5,987,870)
10	Customer Accounting	183,101		183,101	10.09	1,847,360
11	Rents	33,826		33,826	-	-
12	General Office Expense			-	-	-
13	Miscellaneous	229,300		229,300	8.89	2,039,440
14	Maintenance Expense	140,803		140,803	33.61	4,732,543
15	Other Corporate Pro Forma	124,533		124,533	30.00	3,735,990
16	General Taxes-Property	292,953		292,953	191.29	56,040,163
17	General Taxes-Other	34,882		34,882	13.35	465,547
18	Income Taxes	1,996,468		1,996,468	30.13	60,153,581
19	Interest		1,722,901	1,722,901	106.25	183,058,231
20	Total Operating Expenses	7,264,836	1,722,901	8,987,737		389,399,910
21		8,987,737				
22						
23	Expense Lag	Line 20, Col. (E) / Col [C]	43.33			
24	Revenue Lag	Company Workpapers	46.105			
25	Net Lag	Line 24 - 23	2.78			
26	Company Adjusted Expenses	Line 20, Col [C]	8,987,737			
27	Cash Working Capital	Line 25 * Line 26/365 day	68,440			
28	Company As Filed	Co Schedule B-5	73,130			
29	Difference					
30						
31	References:					
32	Column [A]:	Company Schedule C--1, plus revisions docketed August 21, 2009				
33	Column [B]:	Staff adjustments to expenses, See Testimony GWB				
34	Column [C]:	Column [A] + Column [B]				
35	Column [D]:	Expense Lags Per the Company's Lead Lag Study in this proceeding				
36	Column [E]:	Column [C] * Column [D]				

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL PER STAFF

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	\$ 754,087	\$ (24,152)	\$ 729,935	12.00	\$ 8,759,223
2	Purchased Water	625,435	-	625,435	50.92	31,844,918
3	Fuel & Power	1,259,637	83,883	1,343,521	22.70	30,492,144
4	Chemicals	103,351	(103,351)	-	8.73	-
5	Waste Disposal	1,933	-	1,933	4.55	8,803
6	Management Fees	1,158,078	(1,158,078)	-	-	-
7	Group Insurance	209,326	-	209,326	(13.70)	(2,868,562)
8	Pensions	105,808	-	119,955	(2.37)	(284,101)
9	Insurance Other Than Group	71,553	-	71,553	(83.68)	(5,987,870)
10	Customer Accounting	183,101	(40,260)	142,841	20.31	2,900,783
11	Rents	33,826	-	33,826	-	-
12	General Office Expense	-	-	-	-	-
13	Miscellaneous	229,300	-	229,300	8.89	2,039,440
14	Maintenance Expense	140,803	-	140,803	33.61	4,732,543
15	Other Corporate Pro Forma	124,533	-	124,533	30.00	3,735,990
16	General Taxes-Property	292,953	-	288,011	191.29	55,094,788
17	General Taxes-Other	34,882	-	34,882	13.35	465,547
18	Income Taxes	1,996,468	-	1,996,468	30.13	60,153,581
19	Interest	1,722,901	59	1,722,960	106.25	183,064,500
20	Total Operating Expenses	9,047,977	(1,241,899)	7,815,283		374,151,727
21						
22						
23	Expense Lag	Line 20, Col. (E) / Col [C]	47.87			
24	Revenue Lag	Company Workpapers	46.105			
25	Net Lag	Line 24 - 23	(1.77)			
26	Staff Adjusted Expenses	Line 20, Col [C]	7,815,283			
27	Cash Working Capital	Line 25 * Line 26/365 day	(37,883)			
28	Company As Filed	Co Schedule B-5	73,130			
29	Staff Adjustment (L28-L27)	To GWB-4	(111,013)			
30						
31	References:					
32	Column [A]: Per Company, See Schedule GWB-5, Col [C]					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB, or to Working Cap. Calculation					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Per the Company's Lead Lag Study in this proceeding					
36	Column [E]: Column [C] * Column [D]					

ARIZONA-AMERICAN WATER COMPANY - ANTHEM WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB- 8
SURREBUTTAL

RATE BASE ADJUSTMENT #3 - ACCUMULATED DEFERRED INCOME TAXES

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Beginning Balance Per Decision No. 67093	\$ 13,025,093	\$ (336,093)	\$ 12,689,000
2	Allocation Factor	5.53%	5.53%	5.53%
3	Allocation to Anthem	720,068	(18,580)	701,488

REFERENCES:

Columns [A], Line 1: Amounts used by Co as basis for allocation

Column [A], [B] & [C], Line 2: Allocation rate to this system

Column [C], Line 1: Allocable amount per audited financial statements times allocation rate

Column [A], [B] & [C], Line 3: Calculation of allocated amounts

ARIZONA-AMERICAN WATER COMPANY - ANTHEM WATER
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Schedule GWB - 9
SURREBUTTAL

RATE BASE ADJUSTMENT #4 - CIAC ASSOCIATED WITH CWIP

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2008	2,511,217	30,271	2,541,488

REFERENCES:

Columns [A]: Company schedules

Column [B]: Column [C] less Column [A]

Column [C]: See testimony GWB

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Wastewater Revenues	\$ 7,210,624	\$ 9,470	\$ 7,220,094	\$ 5,930,308	\$ 13,150,400
3	Other Wastewater Revenues	272,650	-	272,650	-	272,650
4	Other	-	-	-	-	-
5	Total Operating Revenues	\$ 7,483,274	\$ 9,470	\$ 7,492,744	\$ 5,930,308	\$ 13,423,050
6	Labor	\$ 754,087	\$ (24,152)	729,935	-	\$ 729,935
7	Purchased Water	\$ 625,435	-	625,435	-	625,435
8	Fuel & Power	\$ 1,259,637	83,883	1,343,521	-	1,343,521
9	Chemicals	\$ 103,351	-	103,351	-	103,351
10	Waste Disposal	\$ 1,933	-	1,933	-	1,933
11	Management Fees	\$ 1,158,078	(50,235)	1,107,843	-	1,107,843
12	Group Insurance	\$ 209,326	-	209,326	-	209,326
13	Pensions	\$ 105,808	14,147	119,955	-	119,955
14	Regulatory Expense	\$ 64,489	(5,891)	58,598	-	58,598
15	Insurance Other Than Group	\$ 71,553	-	71,553	-	71,553
16	Customer Accounting	\$ 183,101	(40,260)	142,841	26,686	169,528
17	Rents	\$ 33,826	-	33,826	-	33,826
18	General Office Expense	\$ 60,044	-	60,044	-	60,044
19	Miscellaneous	\$ 229,300	-	229,300	-	229,300
20	Maintenance Expense	\$ 140,803	-	140,803	-	140,803
21	Depreciation & Amortization	\$ 2,399,893	(23,071)	2,376,821	-	2,376,821
22	General Taxes-Property	\$ 292,953	371	293,324	77,536	370,860
23	General Taxes-Other	\$ 34,882	-	34,882	-	34,882
24	Income Taxes	\$ (759,675)	22,956	(736,719)	2,248,804	1,512,085
25	Total Operating Expenses	\$ 6,968,825	(22,252)	\$ 6,946,573	2,353,026	9,299,599
26	Operating Income (Loss)	\$ 514,449	\$ 31,722	\$ 546,171	\$ 3,577,281	\$ 4,123,451

References:

Column (A): Company Schedule C-1
Column (B): Schedule GWB 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29, 34 and 37
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) Purchased Power ADJ #1 GWB-12	(C) Bad Debts ADJ #2 GWB-13	(D) Depreciation Exp. ADJ #3 GWB-14	(E) Income Taxes ADJ #4 GWB-15	(F) Rate Case Exp ADJ #5 GWB-16	(G) Property Taxes ADJ #6 GWB-17	(H) Co Rebuttal Annualization ADJ #7 GWB-18	(I) Co Rebuttal AIP ADJ #8 GWB-19	(J) Co Rebuttal Stock Comp ADJ #9 GWB-20	(K) Co Rebuttal Mgt. Fees ADJ #10 GWB-21	(L) Co Rebuttal Other Exp ADJ #11 GWB-22	(M) Co Rebuttal Bus. Dev. ADJ #12 GWB-23	(N) Co Rebuttal Duress Donations ADJ #13 GWB-24	(O) Co Rebuttal Pension Exp ADJ #14 GWB-25	(P) STAFF ADJUSTED
1	Wastewater Revenues	\$ 7,210,624															\$ 7,220,084
2	Other Wastewater Revenues	272,650															272,650
3	Other																
4																	
5	Total Operating Revenues	\$ 7,483,274	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,470	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,492,744
6	Labor	\$ 754,087															\$ 729,935
7	Purchased Water	625,435															625,435
8	Fuel & Power	1,259,637	83,883														1,343,521
9	Chemicals	103,351															103,351
10	Waste Disposal	1,933															1,933
11	Management Fees	1,156,078															1,107,843
12	Group Insurance	209,326															209,326
13	Pensions	105,808															119,955
14	Regulatory Expense	64,489															58,596
15	Insurance Other Than Group	71,553															71,553
16	Customer Accounting	183,101															142,841
17	Rents	33,826															33,826
18	General Office Expense	60,044															60,044
19	Miscellaneous	229,300															229,300
20	Maintenance Expense	140,803															140,803
21	Depreciation & Amortization	2,399,893															2,376,821
22	General Taxes-Property	282,953															283,324
23	General Taxes-Other	34,882															34,882
24	Income Taxes	(759,875)															(739,719)
25	Total Operating Expenses	\$ 6,968,825	\$ 83,883	\$ (40,260)	\$ (23,071)	\$ 22,856	\$ (5,891)	\$ 371	\$ -	\$ (14,417)	\$ (16,249)	\$ (15,078)	\$ (15,954)	\$ (9,439)	\$ (3,251)	\$ 14,147	\$ 6,946,573
26	Operating Income (Loss)	\$ 514,449	\$ (83,883)	\$ 40,260	\$ 23,071	\$ (22,856)	\$ 5,891	\$ (371)	\$ 9,470	\$ 14,417	\$ 16,249	\$ 15,078	\$ 15,954	\$ 9,439	\$ 3,251	\$ (14,147)	\$ 546,171

References:
Column (A): Company Schedule C-1

ARIZONA-AMERICAN WATER COMPANY - ANTHEM WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-12
SURREBUTTAL

OPERATING INCOME ADJUSTMENT #1 - POWER EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
	Total Adjusted Test Year Fuel & Power Expense	\$1,259,637	\$83,883	\$1,343,521

Column (A): Co. Application Page C-2, Page 9
Column (B): Testimony GWB
Column (C): Column (A) + Column (B)

OPERATING INCOME ADJUSTMENT #2 - BAD DEBT EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Uncollectible Accounts (Ordinary Activity)	\$ 107,894	\$(73,991)	\$ 33,904
2	Uncollectible Accounts-MI (Misc. Invoices)	\$ (33,816)	\$ 33,730	\$ (86)
3	Total Uncollectibles	<u>\$ 74,078</u>	<u>\$(40,260)</u>	<u>\$ 33,818</u>
4				
5	Uncollectible Accounts (Ordinary Activity)	\$ 1,152,299		
6	Allocation Percentage-	9.36%		
7	Company Proposed Amount, See Attachment 1, Col C	\$ 107,894		
8				
9	Staff Test Year Revenues, Schedule GWB-11			\$ 7,492,744
10	3 year average Bad Debt Exp. Rate, Per Co.			0.45%
11	Staff Recommended Bad Debt Exp			<u>\$ 33,904</u>
12				
13	Adjustment for Bad Debt Expense, Ordinary Activity		<u>\$(73,991)</u>	
14				
15				
16	Normalization of Uncollectible Accounts- Miscellaneous Invoices			
17				
18	2006			\$ 341,820
19	2007			\$ 16,584
20	2008			<u>\$ (361,154)</u>
21	3 year total			<u>\$ (2,750)</u>
22	3 year average			\$ (917)
23	2008 Test Year Total, Attachment 1, Col A	\$ (361,154)		
24	Allocation Percentage-	9.36%		9.36%
25	Company Proposed Amount, See Attachment 1, Col C	\$ (33,816)		<u>\$ (86)</u>
26	Adjustment for Uncollectibles-MI		\$ 33,730	
27	Net Adjustment Uncollectibles, Ordinary Activity & MI		<u>\$(40,260)</u>	
28				

References:

Column [A], Company Workpapers
Column [B], line 13: Col. [C], line 11, less Col [A], line 7
Column [B], line 26: Col. [C], line 25, less Col [A], line 25
Column [B], line 27: Col. [B], line 13, plus Col [B], line 26
Column (C): Line 10, Per Company's Workpapers
Column (C): Lines 18-20, & 24 Per Company's Workpapers

OPERATING ADJUSTMENT #3- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	[B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1		<u>PLANT IN SERVICE:</u>			
2	301000	Organization	-	0.00%	-
3	302000	Franchises	4,719,239	0.00%	-
4	303200	Land & Land Rights SS	6,014,990	0.00%	-
5	303300	Land & Land Rights P	20,000	0.00%	-
6	303400	Land & Land Rights	-	0.00%	-
7	303500	Land & Land Rights TD	-	0.00%	-
8	303600	Land & Land Rights AG	-	0.00%	-
9	304100	Struct & Imp SS	4,724,837	2.50%	118,121
10	304200	Struct & Imp P	2,827,247	1.67%	47,215
11	304300	Struct & Imp WT	1,036,209	1.67%	17,305
12	304400	Struct & Imp TD	112,667	1.67%	1,882
13	304600	Struct & Imp Offices	110,668	1.67%	1,848
14	304800	Struct & Imp Misc	-	0.00%	-
15	305000	Collect & Impounding	305,278	2.50%	7,632
16	306000	Lake, River & Other Intakes	405,221	2.50%	10,131
17	307000	Wells & Springs	92,902	2.52%	2,341
18	308000	Infiltration Galleries & Tunne	245,768	2.00%	4,915
19	310100	Power Generation Equip Other	-	4.42%	-
20	311200	Pump Equip Electric	11,714,674	4.42%	517,789
21	311300	Pump Equip Diesel	-	4.42%	-
22	311500	Pump Equip Other	10,327	4.42%	456
23	320100	WT Equip Non-Media	10,975,199	7.06%	774,849
24	320200	WT Equip Filter Media	824,366	5.00%	41,218
25	330000	Dist Reservoirs & Standpipe	4,290,367	1.67%	71,649
26	331001	TD Mains Not Classified by Size	3,298,808	1.53%	50,472
27	331100	TD Mains 4in & Less	15,496,418	1.53%	237,095
28	331200	TD Mains 6in to 8in	7,782,150	1.53%	119,067
29	331300	TD Mains 10in to 16in	4,502,911	1.53%	68,895
30	333000	Services	2,018,339	2.48%	50,055
31	334100	Meters	839,713	6.67%	56,009
32	334200	Meter Installations	353,074	2.51%	8,862
33	334300	Meter Vaults	14,599	2.51%	366
34	335000	Hydrants	2,003,910	2.00%	40,078
35	339100	Other P/E Intangible	-	-	-
36	339500	Other P/E TD	-	-	-
37	340100	Office Furniture & Equip	160,631	4.55%	7,309
38	340200	Comp & Periph Equip	24,847	10.00%	2,485
39	341100	Trans Equip Lt Duty Trks	125,754	20.00%	25,151
40	341200	Trans Equip Hvy Duty Trks	60,218	15.00%	9,033
41	341300	Transportation Equipment - Other	-	20.00%	-
42	341400	Trans Equip Other	17,286	16.67%	2,882
43	342000	Stores Equipment	-	0.00%	-
44	343000	Tools, Shop, Garage Equip	30,146	4.14%	1,248
45	344000	Laboratory Equipment	118,788	3.71%	4,407
46	345000	Power Operated Equipment	4,719	5.14%	243
47	346100	Comm Equip Non-Telephone	137,719	10.28%	14,158
48	346190	Remote Control & Instrumentati	9,960	9.76%	972
49	346200	Comm Equip Telephone	22,846	9.76%	2,230
50	346300	Comm Equip Other	12,107	4.93%	597
51	347000	Miscellaneous Equipment	4	6.19%	0
52			-	-	-
53		Allocated from Corporate	-	-	-
54	303600	Land & Land Rights AG	-	0.00%	-
55	304510	Struct & Imp AG Cap Lease	-	-	-

56	304600	Struct & Imp Offices	-		-
57	304800	Struct & Imp Misc	-		-
58	304620	Struct & Imp Leasehold	10,933	14.28%	1,561
59	331001	Mains	-		-
60	339600	Other P/E CPS	2,855	3.30%	94
61	340100	Office Furniture & Equip	63,745	4.04%	2,575
62	340200	Comp & Periph Equip	27,688	10.00%	2,769
63	340300	Computer Software	100,535	37.71%	37,912
64	340330	Comp Software Other	2,585	37.71%	975
65	340500	Other Office Equipment	-		-
66	341100	Trans Equip Lt Duty Trks	-		-
67	343000	Tools, Shop, Garage Equip	-		-
68	344000	Laboratory Equipment	-		-
69	345000	Power Operated Equipment	-		-
70	346100	Comm Equip Non-Telephone	10,287	9.76%	1,004
71	346200	Comm Equip Telephone	793	9.76%	77
72	346300	Comm Equip Other	271	7.91%	21
73	347000	Misc Equipment	-		-
74					-
75		Phoenix Interconnect	5,000,000	4.00%	200,000
76		Total Plant in Service	90,684,602		2,565,951
77		Less Non Depreciable Plant			
78	301000	Organization	-	0.00%	-
79	302000	Franchises	4,719,239	0.00%	-
80	303200	Land & Land Rights SS	6,014,990	0.00%	-
81	303300	Land & Land Rights P	20,000	0.00%	-
82		Net Depreciable Plant and Depreciation Amounts	\$ 79,930,373		\$ 2,565,951
83		Composite Depreciation Rate		3.21%	
84		Less			
85		Amortization of Regulatory CIAC at Settlement Rate			107,543
86		Amortization of CIAC at Composite Rate	\$ 2,541,488		\$ 81,588
87		Staff Recommended Depreciation Expense			\$ 2,376,821
88		Company Proposed Depreciation Expense			2,399,893
89		Staff Adjustment			\$ (23,071)

References:

Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

ARIZONA-AMERICAN WATER COMPANY - ANTHEM WATER
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Schedule GWB-15
SURREBUTTAL

OPERATING INCOME ADJUSTMENT #4 - INCOME TAXES

LINE ACCT NO. NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Income Taxes	<u>\$ (759,675)</u>	<u>\$ 22,956</u>	<u>\$ (736,719)</u>

References:

Column (A), Company Schedule C-2
Column (B): Testimony GWB
Column (C): Column (A) + Column (B)

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
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Schedule GWB-16
SURREBUTTAL

OPERATING INCOME ADJUSTMENT #5 - RATE CASE EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	RATE CASE EXPENSE	\$ 64,489	\$ (12,500)	\$ 51,989

References:

Column (A), Company Schedule C-2
Column (B): Testimony GWB
Column (C): Column (A) + Column (B)

OPERATING INCOME PROPERTY TAX EXPENSE GRCF COMPONENT

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	\$ 7,492,744	\$ 7,492,744
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	14,985,488	14,985,488
4	Staff Recommended Revenue	7,492,744	13,423,050
5	Subtotal (Line 4 + Line 5)	22,478,232	28,408,538
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	7,492,744	9,469,513
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	14,985,488	18,939,026
10	Plus: 10% of CWIP - 2005	4,586	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	14,990,074	18,952,480
13	Assessment Ratio	22.0%	22.0%
14	Assessment Value (Line 12 * Line 13)	3,297,816	4,169,546
15	Composite Property Tax Rate	8.89%	8.89%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	\$ 293,324	
17	Company Proposed Property Tax	\$ 292,953	
18	Staff Test Year Adjustment (Line 16 - Line 17)	\$ 371	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		\$ 370,860
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		\$ 293,324
21	Increase in Property Tax Due to Increase in Revenue Requirement		\$ 77,536
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		\$ 77,536
23	Increase in Revenue Requirement		\$ 5,930,306
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.30745%

REFERENCES:

Line 15: Composite Tax Rate, per Company
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER

Docket No. WS-01303A-09-0343

Test Year Ended December 31, 2008

SURREBUTTAL TESTIMONY OF GERALD BECKER

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ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-1
SURREBUTTAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	\$ 28,186,062	\$ 28,186,062	\$ 27,828,924	\$ 27,828,924
2	Adjusted Operating Income (Loss)	\$ 861,084	\$ 861,084	\$ 840,282	\$ 840,282
3	Current Rate of Return (L2 / L1)	3.06%	3.06%	3.02%	3.02%
4	Required Rate of Return	8.53%	8.53%	7.20%	7.20%
5	Required Operating Income (L4 * L1)	\$ 2,404,271	\$ 2,404,271	\$ 2,003,683	\$ 2,003,683
6	Operating Income Deficiency (L5 - L2)	\$ 1,543,187	\$ 1,543,187	\$ 1,163,400	\$ 1,163,400
7	Gross Revenue Conversion Factor	1.6402	1.6402	1.6402	1.6402
8	Required Revenue Increase (L7 * L6)	\$ 2,531,130	\$ 2,531,130	\$ 1,908,222	\$ 1,908,222
9	Adjusted Test Year Revenue	\$ 9,283,101	\$ 9,283,101	\$ 9,283,101	\$ 9,283,101
10	Proposed Annual Revenue (L8 + L9)	\$ 11,814,231	\$ 11,814,231	\$ 11,191,323	\$ 11,191,323
11	Required Increase in Revenue (%)	27.27%	27.27%	20.56%	20.56%
12	Rate of Return on Common Equity (%)	12.25%	12.25%	10.20%	10.20%

References:

Column [A]: Company Schedule A-1

Column [B]: Company Schedule A-1

Column [C]: Staff Schedules GWB-2, GWB-3, and GWB-10

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)
<u>Calculation of Gross Revenue Conversion Factor:</u>				
1	Revenue	100.0000%		
2	Uncollectible Factor (Line 11)	0.0921%		
3	Revenues (L1 - L2)	99.9079%		
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	38.9401%		
5	Subtotal (L3 - L4)	60.9678%		
6	Revenue Conversion Factor (L1 / L5)	1.640211		
<u>Calculation of Uncollectible Factor:</u>				
7	Unity	100.0000%		
8	Combined Federal and State Tax Rate (Line 17)	38.5989%		
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%		
10	Uncollectible Rate	0.1500%		
11	Uncollectible Factor (L9 * L10)		0.0921%	
<u>Calculation of Effective Tax Rate:</u>				
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%		
13	Arizona State Income Tax Rate	6.9680%		
14	Federal Taxable Income (L12 - L13)	93.0320%		
15	Applicable Federal Income Tax Rate (Line 44)	34.0000%		
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%		
17	Combined Federal and State Income Tax Rate (L13 + L16)		38.5989%	
<u>Calculation of Effective Property Tax Factor</u>				
18	Unity	100.0000%		
19	Combined Federal and State Income Tax Rate (L17)	38.5989%		
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%		
21	Property Tax Factor (GWB-17, L24)	0.5558%		
22	Effective Property Tax Factor (L20*L21)		0.3413%	
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			38.9401%

24	Required Operating Income (Schedule GWB-1, Line 5)	\$ 2,003,683		
25	Adjusted Test Year Operating Income (Loss) (Schedule GWB-10, Line 42)	\$ 840,282		
26	Required Increase in Operating Income (L24 - L25)		\$ 1,163,400	
27	Income Taxes on Recommended Revenue (Col. (F), L52)	\$ 734,758		
28	Income Taxes on Test Year Revenue (Col. (C), L52)	\$ 3,404		
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		\$ 731,354	
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	\$ 11,191,323		
31	Uncollectible Rate (Line 10)	0.1500%		
32	Uncollectible Expense on Recommended Revenue (L30 * L31)	\$ 16,787		
33	Adjusted Test Year Uncollectible Expense	\$ 13,925		
34	Required Increase in Revenue to Provide for Uncollectible Exp.		\$ 2,862	
35	Property Tax with Recommended Revenue (GWB-17, Line 20)	\$ 166,679		
36	Property Tax on Test Year Revenue (GWB-17, Col A, L17)	\$ 156,074		
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		\$ 10,605	
38	Total Required Increase in Revenue (L26 + L29 + L34+ L37)		\$ 1,908,222	

	(A)	(B)	(C)
	Test Year Sun City Water		Staff Recommended Sun City Water
39	Revenue (Sch GWB-9, Col.(C) L5, GWB-1, Col. (D), L9)	\$ 9,283,101	\$ 11,191,323
40	Operating Expenses Excluding Income Taxes	\$ 8,439,415	\$ 8,452,883
41	Synchronized Interest (L52)	\$ 834,868	\$ 834,868
42	Arizona Taxable Income (L39 - L40 - L41)	\$ 8,818	\$ 1,903,572
43	Arizona State Income Tax Rate	6.9680%	6.9680%
44	Arizona Income Tax (L42 x L43)	\$ 614	\$ 132,641
45	Federal Taxable Income (L42 - L44)	\$ 8,204	\$ 1,770,932
46	Federal Tax @ 34%	\$ 2,789	\$ 602,117
47	Total Federal Income Tax	\$ 2,789	\$ 602,117
48	Combined Federal and State Income Tax (L43 + L47)	\$ 3,404	\$ 734,758

50 Effective Tax Rate

Calculation of Interest Synchronization:

51	Rate Base (Schedule GWB-3, Col. (C), Line 18)	
52	Weighted Average Cost of Debt	
53	Synchronized Interest (L50 X L51)	

N/A
\$ 27,828,924
3.0000%
\$ 834,868

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	\$ 63,616,417	\$ (149,497)	\$ 63,466,920
2	Less: Accumulated Depreciation	18,973,897	(22,008)	18,951,889
3	Net Plant in Service	<u>\$ 44,642,520</u>	<u>\$ (127,489)</u>	<u>\$ 44,515,031</u>
	<u>LESS:</u>			
4	Contributions in Aid of Construction (CIAC)	\$ 13,194,724	\$ 38,991	\$ 13,233,715
5	Less: Accumulated Amortization	15,011	-	15,011
6	Net CIAC	<u>13,179,713</u>	<u>38,991</u>	<u>13,218,704</u>
7	Advances in Aid of Construction (AIAC)	5,860,651	-	5,860,651
8	Imputed Reg AIAC	-	-	-
9	Imputed Reg CIAC	342,458	-	342,458
10	Accumulated Deferred Income Tax Credits	-	-	-
	Customer Meter Deposits	2,450	-	2,450
	<u>ADD:</u>			
11	Accumulated Deferred Income Tax Debits	1,904,817	(49,151)	1,855,666
12	Cash Working Capital	416,111	(141,507)	274,604
13	Prepayments	118,894	-	118,894
14	Supplies Inventory	51,086	-	51,086
15	Projected Capital Expenditures	-	-	-
16	Deferred Debits	437,906	-	437,906
17	Purchase Wastewater Treatment Charges	-	-	-
18	Original Cost Rate Base	<u>\$ 28,186,062</u>	<u>\$ (357,138)</u>	<u>\$ 27,828,924</u>

References:

Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJ #1 GWB-5	(C) ADJ #2 GWB-6	(D) ADJ #3 GWB-7&8	(E) ADJ #4 GWB-9	(F) STAFF ADJUSTED
PLANT IN SERVICE:								
1	301000	Organization	\$ 471					\$ 471
2	302000	Franchises	-					-
3	303200	Land & Land Rights SS	180,023					180,023
4	303300	Land & Land Rights P	8,456					8,456
5	303500	Land & Land Rights TD	10,493					10,493
6	303600	Land & Land Rights AG	2,125					2,125
7	304100	Struct & Imp SS	3,880,262					3,880,262
8	304200	Struct & Imp P	456,858					456,858
9	304300	Struct & Imp WT	126,815					126,815
10	304400	Struct & Imp TD	34,162					34,162
11	304500	Struct & Imp AG	272,321					272,321
12	304600	Struct & Imp Offices	37,340					37,340
13	304800	Struct & Imp Misc	1,386,988					1,386,988
14	305000	Collect & Impounding	314					314
15	307000	Wells & Springs	5,660,450					5,660,450
16	309000	Supply Mains	(70)					(70)
17	310000	Power Generation Equip	148,309					148,309
18	310100	Power Generation Equip Other	-					-
19	311200	Pump Equip Electric	10,186,725					10,186,725
20	311300	Pump Equip Diesel	213,446					213,446
21	311400	Pump Equip Hydraulic	16,219					16,219
22	311500	Pump Equip Other	142,073					142,073
23	320100	WT Equip Non-Media	407,001					407,001
24	330000	Dist Reservoirs & Standpipe	1,477,247					1,477,247
25	331001	TD Mains Not Classified by Size	6,604,111					6,604,111
26	331100	TD Mains 4in & Less	12,507,918					12,507,918
27	331200	TD Mains 6in to 8in	2,266,442					2,266,442
28	331300	TD Mains 10in to 16in	99,361					99,361
29	331400	TD Mains 18in & Grtr	13,489					13,489
30	333000	Services	5,876,584					5,876,584
31	334100	Meters	3,378,717					3,378,717
32	334200	Meter Installations	592,322					592,322
33	335000	Hydrants	2,270,400					2,270,400
34	339500	Other P/E TD	523					523
35	340100	Office Furniture & Equip	801,216					801,216
36	340200	Comp & Periph Equip	305,121					305,121
37	340300	Computer Software	25,335					25,335
38	340310	Computer Software	9,105					9,105
39	340325	Computer Software Custom	7,377					7,377
40	340500	Other Office Equipment	3,654					3,654
41	341100	Trans Equip LI Duty Trks	1,095,694					1,095,694
42	341200	Trans Equip Hwy Duty Trks	23,777					23,777
43	341400	Trans Equip Other	8,233					8,233
44	342000	Stores Equipment	20,038					20,038
45	343000	Tools, Shop, Garage Equip	269,034					269,034
46	344000	Laboratory Equipment	8,560					8,560
47	345000	Power Operated Equipment	151,899					151,899
48	346100	Comm Equip Non-Telephone	221,454					221,454
49	346190	Remote Control & Instrument	17,756					17,756
50	346200	Comm Equip Telephone	7,308					7,308
51	346300	Comm Equip Other	174,797					174,797
52		District Subtotal	61,409,451					61,409,451
53			-					-
54		Allocated from Corporate	-					-
55	303600	Land & Land Rights AG	-					-
56	304510	Struct & Imp AG Cap Lease	-					-
57	304600	Struct & Imp Offices	-					-
58	304800	Struct & Imp Misc	-					-
59	304820	Struct & Imp Leasehold	28,920					28,920
60	331001	Mains	-					-
61	339600	Other P/E CPS	7,553					7,553
62	340100	Office Furniture & Equip	168,625					168,625
63	340200	Comp & Periph Equip	73,243					73,243
64	340300	Computer Software	265,949					265,949
65	340330	Comp Software Other	6,839					6,839
66	340500	Other Office Equipment	-					-
67	341100	Trans Equip LI Duty Trks	-					-
68	343000	Tools, Shop, Garage Equip	-					-
69	344000	Laboratory Equipment	-					-
70	345000	Power Operated Equipment	-					-
71	346100	Comm Equip Non-Telephone	27,213					27,213
72	346200	Comm Equip Telephone	2,098					2,098
73	346300	Comm Equip Other	717					717
74	347000	Misc Equipment	-					-
75	380400	WW TD Equip Aux Eff Trmt	-					-
76	393000	WW Tool Shop & Garage Equip	-					-
77		Corp Allocations Subtotal	581,157					581,157
78			-					-
79		Post Test Year Plant	-					-
80		Well 5.1:	-					-
81	304100	Struct & Imp Supply	52,719					52,719
82	307000	Wells & Springs	580,171					580,171
83	309000	Supply Main	46,550					46,550
84	311200	Pumping Equipment	423,724					423,724
85	320100	WT Equip Non-Media	14,214					14,214
86	347000	Misc Equipment	5,807					5,807
87			1,123,185					1,123,185
88			-					-
89		Well 6.4 Rehabilitation	-					-
90	304100	Struct & Imp Supply	1,830					1,830
91	307000	Wells & Springs	182,268					182,268
92	309000	Supply Main	1,220					1,220
93	311200	Pumping Equipment	294,867					294,867
94	320100	WT Equip Non-Media	12,681					12,681
95	334100	TD Mains 18in & Grtr	9,758					9,758
96			502,625					502,625
97		Less	-					-
98		Youngtown Plant	-	(149,497)				(149,497)
99			-					-
100		Total Plant In Service	63,616,417	(149,497)	-	-	-	63,466,920
101			-					-
102		Accumulated Depreciation	18,973,897	(22,008)	-	-	-	18,951,889
103		Net Plant in Service	\$ 44,642,520	\$ (127,489)	\$ -	\$ -	\$ -	\$ 44,515,031
104			-					-
105		LESS:	-					-
106		Contributions in Aid of Construction (CIAC)	\$ 13,194,724	-	-	\$ -	38,991	13,233,715
107		Less: Accumulated Amortization	15,011	-	-	-	-	15,011
108		Net CIAC (L63 - L64)	13,179,713	-	-	-	38,991	13,218,704
109		Advances in Aid of Construction (AIAC)	5,860,651	-	-	-	-	5,860,651
110		Imputed Reg Advances	-	-	-	-	-	-
111		Imputed Reg CIAC	342,458	-	-	-	-	342,458
112		Accumulated Deferred Income Tax Credits	-	-	-	-	-	-
113		Customer Meter Deposits	2,450	-	-	-	-	2,450
114		ADD:	-					-
115		Accumulated Deferred Income Tax Debits	1,904,817	-	(49,151)	-	-	1,855,666
116		Working Capital Allowance	416,111	-	-	(141,507)	-	274,604
117		Pumping Power	-	-	-	-	-	-
118		Purchase Wastewater Treatment Charges	-	-	-	-	-	-
119		Material and Supplies Inventory	51,086	-	-	-	-	51,086
120		Prepayments	118,894	-	-	-	-	118,894
121		Projected Capital Expenditures	-	-	-	-	-	-
122		Deferred Debits	437,906	-	-	-	-	437,906
123		Original Cost Rate Base	\$ 28,186,062	\$ (127,489)	\$ (49,151)	\$ (141,507)	\$ (38,991)	\$ 27,828,924

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB-5
SURREBUTTAL

RATE BASE ADJUSTMENT #1 PLANT AND ACCUMULATED DEPRECIATION

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	361.20	Youngtown Plant	149,497	(149,497)	-
		Acc Deprec. Youngtown Plant Acc Dep.	22,008	(22,008)	-

References:

Column [A]: Amounts included in plant balances per filing and previous cases

Column (B): Per Testimony GWB

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB- 6
SURREBUTTAL

RATE BASE ADJUSTMENT #2 - ACCUMULATED DEFERRED INCOME TAXES

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Beginning Balance Per Decision No. 67093	\$ 13,025,093	\$ (336,093)	\$ 12,689,000
2	Allocation Factor	14.62%	14.62%	14.62%
3	Allocation to Sun City	1,904,817	(49,151)	1,855,666

REFERENCES:

Columns [A], Line 1: Amounts used by Co as basis for allocation

Column [A], [B] & [C], Line 2: Allocation rate to this system

Column [C], Line 1: Allocable amount per audited financial statements times allocation rate

Column [A], [B] & [C], Line 3: Calculation of allocated amounts

RATE BASE ADJUSTMENT #3 - WORKING CAPITAL PER COMPANY

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] COMPANY ADJUSTMENTS	[C] COMPANY AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	\$ 1,225,670	\$ -	1,225,670	12.00	\$ 14,708,039
2	Purchased Water	\$ (0)	-	(0)	(59.03)	\$ 15
3	Fuel & Power	\$ 1,722,582	-	1,722,582	22.09	\$ 38,048,563
4	Chemicals	\$ 37,037	-	37,037	15.09	\$ 558,821
5	Waste disposal	\$ -	-	-	-	\$ -
6	Management Fees	\$ 1,509,322	-	1,509,322	14.77	\$ 22,294,950
7	Group Insurance	\$ 354,396	-	354,396	(13.70)	\$ (4,856,572)
8	Pensions	\$ 251,435	-	251,435	(2.37)	\$ (595,499)
9	Insurance Other Than Group	\$ 93,255	-	93,255	(83.68)	\$ (7,803,989)
10	Customer Accounting	\$ 235,348	-	235,348	10.09	\$ 2,374,500
11	Rents	\$ 60,016	-	60,016	32.82	\$ 1,969,891
12	Miscellaneous	\$ 300,084	-	300,084	25.96	\$ 7,789,394
13	Maintenance Expense	\$ 652,601	-	652,601	23.25	\$ 15,172,456
14	Other Operating Expenses1	\$ 153,833	-	153,833	30.00	\$ 4,614,978
15		\$ -	-	-	-	\$ -
16	Property Taxes	\$ 156,074	-	156,074	190.63	\$ 29,752,393
17	Taxes Other than Income	\$ 94,912	-	94,912	13.35	\$ 1,266,721
18	Income Tax	\$ 979,846	-	979,846	30.13	\$ 29,522,765
19	Interest	\$ 845,582	-	845,582	106.25	\$ 89,843,074
20	Total Operating Expenses	8,671,993	-	8,671,993		244,660,500
21						
22						
23	Expense Lag	Line 20, Col. (E) / Col [C]	28.21			
24	Revenue Lag	Company Workpapers	45.727			
25	Net Lag	Line 24 - 23	17.51			
26	Company Adjusted Expenses	Line 20, Col C	8,671,993			
27	Cash Working Capital	Line 25 * Line 26/365 day	416,111			
28	Company As Filed		416,111			
29	Difference		\$ -			
30						
31	References:					
32	Column [A]: Company Schedule C-1					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Per the Company's Lead Lag Study in this proceeding					
36	Column [E]: Column [C] * Column [D]					

RATE BASE ADJUSTMENT #3 - WORKING CAPITAL PER STAFF

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	\$ 1,225,670		1,225,670	12.00	\$ 14,708,039
2	Purchased Water	\$ (0)		(0)	(59.03)	\$ 15
3	Fuel & Power	\$ 1,722,582		1,722,582	22.09	\$ 38,048,563
4	Chemicals	\$ 37,037	(37,037)	(0.00)	15.09	\$ (0)
5	Waste disposal	\$ -		-	-	\$ -
6	Management Fees	\$ 1,509,322	(1,509,322)	-	-	\$ -
7	Group Insurance	\$ 354,396		354,396	(13.70)	\$ (4,856,572)
8	Pensions	\$ 251,435		251,435	(2.37)	\$ (595,499)
9	Insurance Other Than Group	\$ 93,255		93,255	(83.68)	\$ (7,803,989)
10	Customer Accounting	\$ 235,348	(54,653)	180,696	20.31	\$ 3,669,530
11	Rents	\$ 60,016		60,016	32.82	\$ 1,969,891
12	Miscellaneous	\$ 300,084		300,084	25.96	\$ 7,789,394
13	Maintenance Expense	\$ 652,601		652,601	23.25	\$ 15,172,456
14	Other Operating Expenses ¹	\$ 153,833		153,833	30.00	\$ 4,614,978
15		\$ -		-		\$ -
16	Property Taxes	\$ 156,074		156,074	190.63	\$ 29,752,393
17	Taxes Other than Income	\$ 94,912		94,912	13.35	\$ 1,266,721
18	Income Tax	\$ 979,846		979,846	30.13	\$ 29,522,765
19	Interest	\$ 845,582		845,582	106.25	\$ 89,843,074.23
20	Total Operating Expenses	8,671,993	(1,601,012)	7,070,981	106	223,101,760
21						
22						
23	Expense Lag	Line 20, Col. (E) / Col [C]	31.55			
24	Revenue Lag	Company Workpapers	45.727			
25	Net Lag	Line 24 - 23	14.17			
26	Staff Adjusted Expenses	Line 20, Col C	7,070,981			
27	Cash Working Capital	Line 25 * Line 26/365 day	274,604			
28	Company As Filed	Co Schedule B-5	416,111			
29	Staff Adjustment (L28-L27)	To GWB-4	(141,507)			
30						
31	References:					
32	Column [A]: Per Company, See Schedule GWB-6, Col [C]					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Per the Company's Lead Lag Study in this proceeding					
36	Column [E]: Column [C] * Column [D]					

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
Docket No. WS-01303A-09-0343
Test Year Ended December 31, 2008

Schedule GWB - 9
SURREBUTTAL

RATE BASE ADJUSTMENT #4 - CIAC ASSOCIATED WITH CWIP

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2008	13,194,724	38,991	13,233,715

REFERENCES:

Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1	Water Revenues	\$ 9,125,203	\$ -	\$ 9,125,203	\$ 1,908,222	\$ 11,033,425
2	Other Revenues	157,898	-	157,898	-	157,898
3	Other	-	-	-	-	-
4	Total Operating Revenues	\$ 9,283,101	\$ -	\$ 9,283,101	\$ 1,908,222	\$ 11,191,323
5	Labor	\$ 1,225,670	\$ (31,378)	\$ 1,194,292	\$ -	\$ 1,194,292
6	Purchased Water	-	-	-	-	-
7	Fuel & Power	1,722,582	228,562	1,951,144	-	1,951,144
8	Chemicals	37,037	(367)	36,671	-	36,671
9	Waste Disposal	-	-	-	-	-
10	Management Fees	1,509,322	(65,472)	1,443,850	-	1,443,850
11	Group Insurance	354,396	-	354,396	-	354,396
12	Pensions	251,435	18,438	269,873	-	269,873
13	Regulatory Expense	75,286	(5,891)	69,395	-	69,395
14	Insurance Other Than Group	93,255	-	93,255	-	93,255
15	Customer Accounting	235,348	(54,653)	180,696	2,862	183,558
16	Rents	60,016	-	60,016	-	60,016
17	General Office Expense	78,546	-	78,546	-	78,546
18	Miscellaneous	300,084	(21,688)	278,396	-	278,396
19	Maintenance Expense	652,601	-	652,601	-	652,601
20	Depreciation & Amortization	1,565,706	(40,407)	1,525,299	-	1,525,299
21	General Taxes-Property	156,074	-	156,074	10,605	166,679
22	General Taxes-Other	94,912	-	94,912	-	94,912
23	Income Taxes	9,746	(6,342)	3,404	731,354	734,758
24						
25	Total Operating Expenses	8,422,017	20,802	8,442,819	744,822	9,187,641
26	Operating Income (Loss)	\$ 861,084	\$ (20,802)	\$ 840,282	\$ 1,163,400	\$ 2,003,682

References:

Column (A): Company Schedule C-1
Column (B): Schedule GWB 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29, 34 and 37
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) Power Expense ADJ #1 GWB-12	(C) Water Loss ADJ #2 GWB-13	(D) Bad Debt Exp ADJ #3 GWB-14	(E) Water Testing ADJ #4 GWB-15	(F) Depreciation Exp. ADJ #5 GWB-16	(G) Income Taxes ADJ #6 GWB-17	(H) Rate Case ADJ #7	(I) Co Rebuttal AIP ADJ #8	(J) Co Rebuttal Stock Comp ADJ #9	(K) Co Rebuttal Mgmt Fees ADJ #10	(L) Co Rebuttal Other Exp ADJ #11	(M) Co Rebuttal Bus Dev ADJ #12	(N) Co Rebuttal Dues & Donatio ADJ #13	(O) Co Rebuttal AAW Correction Pension Exp ADJ #14	(P) STAFF ADJUSTED
1	Water Revenues	\$ 9,125,203	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,125,203
2	Other Revenues	157,898	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157,898
3	Other																
4	Total Operating Revenues	\$ 9,283,101	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,283,101
5	Labor	\$ 1,225,670	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (18,690)	\$ (12,688)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,194,282
6	Purchased Water																
7	Fuel & Power	1,722,562	248,073	(19,511)	-	-	-	-	-	-	-	-	-	-	-	-	1,951,144
8	Chemicals	37,037	-	(367)	-	-	-	-	-	-	-	-	-	-	-	-	36,671
9	Waste Disposal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Management Fees	1,509,322	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,443,850
11	Group Insurance	75,288	-	-	-	-	-	-	-	-	-	-	-	-	-	-	354,396
12	Pensions	251,435	-	-	-	-	-	-	-	-	-	-	-	-	-	-	269,873
13	Regulatory Expense	93,255	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68,395
14	Insurance Other Than Group	235,348	-	-	-	-	-	-	-	-	-	-	-	-	-	-	93,255
15	Customer Accounting	80,016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	180,696
16	Rents	78,546	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60,016
17	General Office Expense	300,084	-	-	-	-	-	-	-	-	-	-	-	-	-	-	278,386
18	Miscellaneous	652,601	-	-	-	-	-	-	-	-	-	-	-	-	-	-	652,601
19	Maintenance Expense	1,585,708	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,525,299
20	Depreciation & Amortization	156,074	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156,074
21	General Taxes-Property	94,912	-	-	-	-	-	-	-	-	-	-	-	-	-	-	94,912
22	General Taxes-Other	9,746	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,404
23	Income Taxes							(6,342)									
24																	
25																	
26	Total Operating Expenses	\$ 8,422,017	\$ 248,073	\$ (19,878)	\$ (54,653)	\$ (21,688)	\$ (40,407)	\$ (6,342)	\$ (5,891)	\$ (18,690)	\$ (21,178)	\$ (19,652)	\$ (20,793)	\$ (12,301)	\$ (4,236)	\$ 18,438	\$ 8,442,619
27	Operating Income (Loss)	\$ 861,084	\$ (248,073)	\$ 19,878	\$ 54,653	\$ 21,688	\$ 40,407	\$ 6,342	\$ 5,891	\$ 18,690	\$ 21,178	\$ 19,652	\$ 20,793	\$ 12,301	\$ 4,236	\$ (18,438)	\$ 840,282

References:
Column (A): Company Schedule C-1

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
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Schedule GWB-12
SURREBUTTAL

OPERATING INCOME ADJUSTMENT #1 - POWER EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED*
1	Power Expense	<u>\$ 1,722,582</u>	<u>\$ 248,073</u>	<u>\$ 1,970,655</u>

References:

Column (A), Company Schedule C-1

Column (B): Testimony GWB

Column (C): Column (A) + Column (B)

*: Not including Operating Income Adjustment #2 on Schedule GWB-13

OPERATING INCOME ADJUSTMENT #2 - EXCESS WATER LOSS

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Power Expense	\$ 1,722,582		
2	Staff Adjustment #1 (GWB-11)	\$ 248,073		
3	Subtotal Power	\$ 1,970,655	\$ (19,511)	\$ 1,951,144
4				
5	Chemicals Expense	\$ 37,037	\$ (367)	\$ 36,671
6	Disallowance Percent			
7	Adjustment to Chemical Exp.	\$ -		
8	Disallowance Factor:			
9	Acceptable Loss	10.00%		
10	Water Loss, Per Engineering	11.10%		
11	Allowable Percent of Exp.	99.01%	(1+Line 9) / (1+Line 10)	
12	Disallowance Percent	0.99%	1 minus Line 11	

References:

Column (A), Company Schedule C-1

Column (B): Testimony GWB , or Company proposed times disallowance factor Line 12

Column (C): Column (A) + Column (B)

OPERATING INCOME ADJUSTMENT #3 - BAD DEBT EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Uncollectible Accounts (Ordinary Activity)	\$ 140,618	\$ (98,614)	\$ 42,005
2	Uncollectible Accounts-MI (Misc. Invoices)	\$ (44,073)	\$ 43,961	\$ (112)
3	Total Uncollectibles	<u>\$ 96,546</u>	<u>\$ (54,653)</u>	<u>\$ 41,893</u>
4				
5	Uncollectible Accounts (Ordinary Activity)	\$ 1,152,299		
6	Allocation Percentage-	12.20%		
7	Company Proposed Amount, See Attachment 1, Col C	\$ 140,618		
8				
9	Staff Test Year Revenues, Schedule GWB-11			\$ 9,283,101
10	3 year average Bad Debt Exp. Rate, Per Co.			0.45%
11	Staff Recommended Bad Debt Exp			<u>\$ 42,005</u>
12				
13	Adjustment for Bad Debt Expense, Ordinary Activity		<u>\$ (98,614)</u>	
14				
15				
16	Normalization of Uncollectible Accounts- Miscellaneous Invoices			
17				
18	2006			\$ 341,820
19	2007			\$ 16,584
20	2008			<u>\$ (361,154)</u>
21	3 year total			<u>\$ (2,750)</u>
22	3 year average			\$ (917)
23	2008 Test Year Total, Attachment 1, Col A	\$ (361,154)		
24	Allocation Percentage-	12.20%		12.20%
25	Company Proposed Amount, See Attachment 1, Col C	<u>\$ (44,073)</u>		<u>\$ (112)</u>
26	Adjustment for Uncollectibles-MI		\$ 43,961	
27	Net Adjustment Uncollectibles, Ordinary Activity & MI		<u>\$ (54,653)</u>	
28				

References:

Column [A], Company Workpapers
Column [B], line 13: Col. [C], line 11, less Col [A], line 7
Column [B], line 26: Col. [C], line 25, less Col [A], line 25
Column [B], line 27: Col. [B], line 13, plus Col [B], line 26
Column (C): Line 10, Per Company's Workpapers
Column (C): Lines 18-20, & 24 Per Company's Workpapers

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WATER
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Schedule GWB-15
SURREBUTTAL

OPERATING INCOME ADJUSTMENT #4 - WATER TESTING EXPENSE

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>[A] COMPANY PROPOSED</u>	<u>[B] STAFF ADJUSTMENTS</u>	<u>[C] STAFF RECOMMENDED</u>
1	Water Testing Expense*	<u>\$ 300,084</u>	<u>\$ (21,688)</u>	<u>\$ 278,396</u>

References:

Column (A), Company Schedule C-1

Column (B): Rebuttal Testimony of Linda Gutowski, page 14 of 21

Column (C): Column (A) + Column (B)

* Included in Miscellaneous Expenses

OPERATING INCOME ADJUSTMENT #5- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	[B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1		<u>PLANT IN SERVICE:</u>			
2	301000	Organization	471	0.00%	-
3	302000	Franchises	-	0.00%	-
4	303200	Land & Land Rights SS	180,023	0.00%	-
5	303300	Land & Land Rights P	8,456	0.00%	-
6	303500	Land & Land Rights TD	10,493	0.00%	-
7	303600	Land & Land Rights AG	2,125	0.00%	-
8	304100	Struct & Imp SS	3,880,262	2.50%	97,007
9	304200	Struct & Imp P	456,858	1.67%	7,630
10	304300	Struct & Imp WT	126,815	1.67%	2,118
11	304400	Struct & Imp TD	34,162	2.00%	683
12	304500	Struct & Imp AG	272,321	3.99%	10,866
13	304600	Struct & Imp Offices	37,340	4.63%	1,729
14	304800	Struct & Imp Misc	1,386,988	1.67%	23,163
15	305000	Collect & Impounding	314	2.50%	8
16	307000	Wells & Springs	5,660,450	2.52%	142,643
17	309000	Supply Mains	(70)	2.00%	(1)
18	310000	Power Generation Equip	148,309	4.42%	6,555
19	310100	Power Generation Equip Other	-	4.42%	-
20	311200	Pump Equip Electric	10,186,725	4.42%	450,253
21	311300	Pump Equip Diesel	213,446	5.00%	10,672
22	311400	Pump Equip Hydraulic	16,219	4.42%	717
23	311500	Pump Equip Other	142,073	5.01%	7,118
24	320100.0	WT Equip Non-Media	407,001	7.06%	28,734
25	330000	Dist Reservoirs & Standpipe	1,477,247	1.67%	24,670
26	331001	TD Mains Not Classified by Size	6,604,111	1.53%	101,043
27	331100	TD Mains 4in & Less	12,507,918	1.53%	191,371
28	331200	TD Mains 6in to 8in	2,266,442	1.53%	34,677
29	331300	TD Mains 10in to 16in	99,361	1.53%	1,520
30	331400	TD Mains 18in & Grtr	13,489	2.00%	270
31	333000	Services	5,876,584	2.48%	145,739
32	334100	Meters	3,378,717	6.67%	225,360
33	334200	Meter Installations	592,322	2.51%	14,867
34	335000	Hydrants	2,270,400	2.00%	45,408
35	339500	Other P/E TD	523	0.00%	-
36	340100	Office Furniture & Equip	801,216	4.59%	36,776
37	340200	Comp & Periph Equip	305,121	10.00%	30,512
38	340300	Computer Software	25,335	25.00%	6,334
39	340310	Computer Software	9,105	25.00%	2,276
40	340325	Computer Software Custom	7,377	25.00%	1,844
41	340500	Other Office Equipment	3,854	7.13%	275
42	341100	Trans Equip Lt Duty Trks	1,095,694	20.00%	219,139
43	341200	Trans Equip Hvy Duty Trks	23,777	15.00%	3,567
44	341400	Trans Equip Other	8,233	16.67%	1,372
45	342000	Stores Equipment	20,038	3.91%	783
46	343000	Tools, Shop, Garage Equip	269,034	4.02%	10,815
47	344000	Laboratory Equipment	9,560	3.71%	355
48	345000	Power Operated Equipment	151,899	5.20%	7,899
49	346100	Comm Equip Non-Telephone	221,454	10.30%	22,810
50	346190	Remote Control & Instrument	17,756	10.30%	1,829
51	346200	Comm Equip Telephone	7,308	10.30%	753
52	346300	Comm Equip Other	174,797	4.93%	8,618
53		District Subtotal	61,409,451		
54			-		
55		Allocated from Corporate	-		

56	303600	Land & Land Rights AG	-	-	-
57	304510	Struct & Imp AG Cap Lease	-	-	-
58	304600	Struct & Imp Offices	-	-	-
59	304800	Struct & Imp Misc	-	-	-
60	304620	Struct & Imp Leasehold	28,920	14.28%	4,130
61	331001	Mains	-	-	-
62	339600	Other P/E CPS	7,553	3.30%	249
63	340100	Office Furniture & Equip	168,625	3.87%	6,526
64	340200	Comp & Periph Equip	73,243	10.00%	7,324
65	340300	Computer Software	265,949	25.00%	66,487
66	340330	Comp Software Other	6,839	25.00%	1,710
67	340500	Other Office Equipment	-	-	-
68	341100	Trans Equip Lt Duty Trks	-	-	-
69	343000	Tools,Shop,Garage Equip	-	-	-
70	344000	Laboratory Equipment	-	-	-
71	345000	Power Operated Equipment	-	-	-
72	346100	Comm Equip Non-Telephone	27,213	8.25%	2,245
73	346200	Comm Equip Telephone	2,098	8.25%	173
74	346300	Comm Equip Other	717	5.35%	38
75	347000	Misc Equipment	-	-	-
76	380400	WW TD Equip Aux Effl Trmt	-	-	-
77	393000	WW Tool Shop & Garage Equip	-	-	-
78	0	Corp Allocations Subtotal	581,157		
79		Youngtown Plant	(149,497)	2.83%	(4,231)
80		Post Test Year Plant	-		
81		Well 5.1:	-		
82	304100	Struct & Impr Supply	52,719	2.50%	1,318
83	307000	Wells & Springs	580,171	2.52%	14,620
84	309000	Supply Main	46,550	2.00%	931
85	311200	Pumping Equipment	423,724	4.42%	18,729
86	320100	WT Equip Non-Media	14,214	7.06%	1,004
87	347000	Misc Equipment	5,807	-	-
88		Total Well 5.1	1,123,185		
89			-		
90		Well 6.4 Rehabilitation	-		
91	304100	Struct & Impr Supply	1,830	2.50%	46
92	307000	Wells & Springs	182,268	2.52%	4,593
93	309000	Supply Main	1,220	2.00%	24
94	311200	Pumping Equipment	294,867	4.42%	13,033
95	320100	WT Equip Non-Media	12,681	7.06%	895
96	334100	TD Mains 18in & Grtr	9,758	<u>6.67%</u>	651
97	0	Total Well 6.4	502,625		
98			-		
99		Plant in Service	63,466,920		2,071,271
100					
101					
102		Less Non Depreciable Plant			
103	301000	Organization	471	0.00%	-
104	303200	Land & Land Rights SS	180,023	0.00%	-
105	303300	Land & Land Rights P	8,456	0.00%	
106	303500	Land & Land Rights TD	10,493	0.00%	
107	303600	Land & Land Rights AG	2,125	0.00%	
108					
109		Net Depreciable Plant and Depreciation Amounts	\$ 63,265,352		\$ 2,071,271
110		Composite Depreciation Rate		3.27%	
111		Less			
112		Amortization of Regulatory CIAC at Settlement Rate			112,708
113		Amortization of CIAC at Composite Rate	\$ 13,233,715		<u>\$ 433,264</u>
114		Staff Recommended Depreciation Expense			\$ 1,525,299
115		Company Proposed Depreciation Expense			<u>1,565,706</u>
116		Staff Adjustment			<u>\$ (40,407)</u>

References:

Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

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Schedule GWB-17
SURREBUTTAL

OPERATING INCOME ADJUSTMENT #6 - INCOME TAXES

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Income Taxes	\$ 9,746	\$ (6,342)	\$ 3,404

References:

Column (A), Company Schedule C-2
Column (B): Testimony GWB
Column (C): Column (A) + Column (B)

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Schedule GWB-18
SURREBUTTAL

OPERATING INCOME ADJUSTMENT #7 - RATE CASE EXPENSE

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>[A] COMPANY PROPOSED</u>	<u>[B] STAFF ADJUSTMENTS</u>	<u>[C] STAFF RECOMMENDED</u>
1	RATE CASE EXPENSE	<u>\$ 75,286</u>	<u>\$ (5,891)</u>	<u>\$ 69,395</u>

References:

Column (A), Company Schedule C-2
Column (B): Testimony GWB
Column (C): Column (A) + Column (B)

OPERATING INCOME PROPERTY TAX EXPENSE GRCF COMPONENT

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	\$ 9,283,101	\$ 9,283,101
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	18,566,202	18,566,202
4	Staff Adjusted Test Year Revenues - 2007	9,283,101	
5	Staff Recommended Revenue		11,191,323
6	Subtotal (Line 3 + Line 4) & (Line 3 + Line 5)	27,849,303	29,757,525
7	Number of Years	3	3
8	Three Year Average (Line 6 / Line 7)	9,283,101	9,919,175
9	Department of Revenue Multiplier	2	2
10	Revenue Base Value (Line 7 * Line 8)	18,566,202	19,838,350
11	Plus: 10% of CWIP - 2008	151,628	151,628
12	Less: Net Book Value of Licensed Vehicles	-	-
13	Full Cash Value (Line 10 + Line 11 - Line 12)	18,717,830	19,989,978
14	Assessment Ratio	22.0%	22.0%
15	Assessment Value (Line 13 * Line 14)	4,117,923	4,397,795
16	Composite Property Tax Rate	3.79%	3.79%
17	Staff Test Year Adjusted Property Tax Expense (Line 15 * Line 16)	\$ 156,074	
18	Company Proposed Property Tax	\$ 156,074	
19	Staff Test Year Adjustment (Line 16 - Line 17)	\$ 0	
20	Property Tax on Staff Recommended Revenue (Line 15 * Line 16)		\$ 166,679
21	Staff Test Year Adjusted Property Tax Expense (Line 17)		\$ 156,074
22	Increase in Property Tax Due to Increase in Revenue Requirement		\$ 10,605
23	Increase in Property Tax Due to Increase in Revenue Requirement (Line 22)		\$ 10,605
24	Increase in Revenue Requirement		\$ 1,908,222
25	Increase in Property Tax Per Dollar Increase in Revenue (Line 23 / Line 24)		0.55577%

REFERENCES:

Line 15: Composite Tax Rate, per Company
Line 17: Company Schedule C-1, Line 27
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

0

ATTACHMENT 1

Reconciliation of Schedule C-1, Customer Accounting to Supporting Worksheets

Note: CA means Customer Accounting, not California

Line No.		[A] Central/Western AZ Corporate Total 12/31/2008 Recorded	[B] Sun City Water Corp Allocation 12/31/2008 Actual	[C] Anthem Water Corp Allocation 12/31/2008 Actual
1	Factor Allocation Percentages used:		12.20%	9.36%
2	P18 Customer Accounting	\$ 46,423	\$ 5,665	\$ 4,347
3		\$ 1,152,299	\$ 140,618	\$ 107,894
4		\$ (361,154)	\$ (44,073)	\$ (33,816)
5	575000	\$ 3,018	\$ 368	\$ 283
6		\$ -	\$ -	\$ -
7		\$ -	\$ -	\$ -
8		\$ -	\$ -	\$ -
9		\$ 161,225	\$ 19,675	\$ 15,096
10		\$ 21,336	\$ 2,604	\$ 1,998
11		\$ 11,301	\$ 1,379	\$ 1,058
12		\$ 223,097	\$ 27,225	\$ 20,889
13		\$ 26,411	\$ 3,223	\$ 2,473
14		\$ -	\$ -	\$ -
15		\$ 543,710	\$ 66,350	\$ 50,910
16		\$ 682	\$ 83	\$ 64
17		\$ -	\$ -	\$ -
18		\$ 46,102	\$ 5,626	\$ 4,317
19		\$ 24,724	\$ 3,017	\$ 2,315
20		\$ -	\$ -	\$ -
21	P18 Customer Accounting	\$ 1,899,173	\$ 231,762	\$ 177,827
22	Total	\$ -	\$ 187	\$ 862
23	Amount Recorded Directly (Not Allocated)	\$ -	\$ 231,949	\$ 178,689
24	Total, as recalculated above.	\$ -	\$ -	\$ -
25		\$ -	\$ -	\$ -
26	Test Year Book Results, Customer Accounting	\$ -	\$ 231,949	\$ 178,689
27	Expense, Schedule C-1	\$ -	\$ 0	\$ 0
28	Unreconciled Difference.	\$ -	\$ -	\$ -

Sources:

Columns [A]-[C], lines 1-21: From Company Workpaper,
08 A of I-AZ Corp Summary w Pro Formas Distributed to Districts.xls

Columns [B], line 23: From Company Workpaper,
Sun City Water AI 2008.xls

Columns [C], line 23: From Company Workpaper,
Anthem Water AI 2008.xls

Columns [B] and [C], lines 26-27: Company's Application

Spread the Uncollectible Provision based on Water, Sewer, and Other Revenue to the Districts (Ignoring Corporate)

	2006										2007										2008																
	PV	Aqua Fria	Water	Sun City	Water	Sun City	Wastewater	SC West	Mohave	Wastewater	Antheim/Aqua Fria		PV	Aqua Fria	Water	Sun City	Water	Sun City	Wastewater	SC West	Mohave	Wastewater	Antheim/Aqua Fria		PV	Aqua Fria	Water	Sun City	Water	Sun City	Wastewater	SC West	Mohave	Wastewater	Antheim/Aqua Fria		
Revenue	\$5,353,492	\$15,897,608	\$8,378,382	\$4,233,262	\$4,923,207	\$4,629,658	\$597,106	\$659,317	\$6,023,425	\$5,581,030	\$405,902	\$61,072,119	\$7,935,260	\$19,057,402	\$8,292,252	\$4,963,687	\$6,155,490	\$4,992,797	\$7,151,971	\$1,001,837	\$5,617,132	\$6,157,629	\$428,845	\$69,852,343	\$8,395,274	\$19,705,173	\$9,103,299	\$5,484,208	\$5,318,016	\$5,369,852	\$4,936,639	\$756,925	\$949,648	\$6,309,671	\$7,504,965	\$423,252	\$74,256,922
% to Total	8.77%	26.03%	13.72%	7.19%	6.93%	7.58%	0.98%	1.08%	9.66%	9.14%	0.66%	100.00%	11.36%	27.28%	11.87%	7.13%	8.81%	7.15%	1.02%	1.43%	8.04%	8.82%	0.61%	100.00%	11.31%	26.54%	12.26%	7.39%	7.16%	7.23%	6.65%	1.02%	10.11%	8.50%	10.11%	0.57%	100.00%
Uncollectible Provision	\$16,110.56	\$47,841.54	\$25,213.52	\$13,210.25	\$12,739.39	\$14,815.68	\$13,932.28	\$1,796.80	\$1,826.62	\$1,795.30	\$1,221.50	\$183,787.66	\$32,163.93	\$77,245.22	\$33,610.92	\$20,200.34	\$24,950.00	\$20,237.27	\$2,902.04	\$4,060.74	\$22,767.88	\$24,958.67	\$1,738.23	\$283,131.97	\$38,616.64	\$90,639.98	\$41,873.41	\$25,226.30	\$24,461.84	\$22,707.58	\$3,481.71	\$4,368.20	\$29,023.27	\$34,521.39	\$1,946.88	\$341,567.48	
% of Revenue	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	
Charge Offs	\$3,582.77	\$66,890.02	\$20,745.75	\$8,802.50	\$1,200.53	\$735.47	\$59,996.29	\$3,580.17	\$9,276.89	\$27,138.72	\$397.35	\$206,561.39	\$999.70	\$22,472.93	\$4,740.44	\$1,244.12	\$391.48	\$36.51	\$6,007.12	\$96.10	\$6,471.89	\$4,006.08	\$0.00	\$46,874.88	\$22,472.93	\$4,740.44	\$1,244.12	\$391.48	\$36.51	\$6,007.12	\$96.10	\$6,471.89	\$4,006.08	\$0.00	\$46,874.88		
Collections of Previous Write Offs	\$2,583.07	(\$44,417.09)	(\$16,005.31)	(\$7,558.38)	(\$803.05)	(\$698.96)	(\$3,989.17)	(\$3,484.07)	(\$2,805.00)	(\$23,132.64)	(\$397.35)	(\$159,686.51)	(\$2,583.07)	(\$44,417.09)	(\$16,005.31)	(\$7,558.38)	(\$803.05)	(\$698.96)	(\$3,989.17)	(\$3,484.07)	(\$2,805.00)	(\$23,132.64)	(\$397.35)	(\$159,686.51)	(\$11,828.44)	(\$9,220.84)	(\$5,230.46)	(\$2,645.40)	(\$2,398.74)	(\$2,318.62)	(\$56,692.63)	(\$10,581.12)	(\$47,699.61)	(\$41,579.86)	(\$2,103.65)	(\$202,215.49)	
% of Revenue	0.05%	0.28%	0.19%	0.17%	0.02%	0.01%	1.17%	0.58%	0.05%	0.41%	0.10%	0.26%	0.05%	0.28%	0.19%	0.02%	0.01%	1.17%	0.58%	0.05%	0.41%	0.10%	0.26%	0.05%	0.14%	0.05%	0.06%	0.05%	0.04%	1.19%	0.40%	0.83%	0.55%	0.50%	0.27%		
3 Year Average of Net Charge Offs	0.10%	0.18%	0.15%	0.13%	0.03%	0.03%	1.26%	0.90%	0.45%	0.51%	0.10%	0.29%	0.10%	0.18%	0.15%	0.13%	0.03%	1.26%	0.90%	0.45%	0.51%	0.10%	0.29%	0.10%	0.14%	0.05%	0.06%	0.05%	0.04%	1.19%	0.40%	0.83%	0.55%	0.50%	0.27%		

EXHIBIT

S-11

ALL-STATE LEGAL®

EXHIBIT

340	340100	Office Furniture & Equipments	4.59	4.59	4.59
	340200	Computer & periph equipment	4.59	10.00 ²	10.00
	340300	Computer Software	N/A	25.00 ²	25.00
	340310	Computer Software	N/A	25.00 ²	25.00
	340325	Computer Software Custom	N/A	25.00 ²	25.00
	340330	Computer Software other	N/A	25.00 ²	25.00
	340500	Other Office Equip – ice/water machine ¹	N/A	7.13 ¹	7.13
341		Transportation Equipment			
	341100	Transportation Equip, Lt Duty Trucks	25.00	20.00 ²	20.00
	341200	Transportation Equip, heavy Duty Trucks	25.00	15.00 ²	15.00
	341400	Trans Equip – Other – trailer for flatbed backhoe ¹	N/A	16.67	16.67
342	342000	Store Equipments	3.91	3.91	3.91
343	343000	Tools Shop & Garage Equipments	4.02	4.02	4.02
344	344000	Lab equipments	3.71	3.71	3.71
345	345000	Power operated equipments	5.20	5.20	5.20
346		Communication Equipments			
	346100	Communication Equip non-telephone	10.30	10.30	10.30
	346190	Remote Control & Instrument	10.30	10.30	10.30
	346200	Communication Equip - Telephone	10.30	10.30	10.30
	346300	Communication Equip Other	4.93	4.93	4.93
347	347000	Misc Equipment	0.0	6.19 ⁴	6.19

Notes:

1. Per the District's response to Data Request STF 14.1-14.7.
2. Referred to Decision #71410.
3. This account is for easement/right of way, the depreciation rate should be 0%.
4. According to the District, this account only includes an eye wash drench for Well #5.1 that was in service in May 2009.
5. Per the District's February 18 and 19 e-mails, the Company had begun its 15-year automatic meter replacement program in 2009. The depreciation rate for meter should be 6.67%.